

The JOURNAL

of the Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 48

AUGUST, 1949

NUMBER 8

Evaluation of the Cardiac Patient as a Surgical or Obstetrical Risk

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IN ADDITION TO the complications inherent in the course of their heart diseases, cardiac patients are subject also to the usual vicissitudes of existence. The superimposition of pregnancy or of the necessity for a major surgical procedure in a patient with pre-existing heart disease demands keen judgment on the part of the medical attendant. The balance between the patient's cardiac reserve and the need for an operation or child-bearing must be weighed carefully, with full appreciation of the problems involved in carrying a cardiac patient through the rigors of a pregnancy or an operation. We shall review these problems in general fashion, and discuss the factors which must be considered in the evaluation and management of the cardiac patient as a surgical or obstetrical risk.

Diagnosis

In the absence of a record of previous examinations, the diagnosis of heart disease during pregnancy may occasionally be exceedingly difficult, particularly in the last trimester. The alterations in circulatory dynamics produced by the pregnancy itself may simulate the findings in heart disease.^{7,8} Dyspnea, palpitation, and a rapid pulse are common concomitants of pregnancy. Elevation of the diaphragm with resultant shift of the heart to a more transverse position may suggest cardiac en-

largement clinically. Systolic murmurs at the apex and/or base are almost the rule. Accentuation and splitting of the second pulmonic sound occur frequently. There is an increase in cardiac output, blood volume, and venous pressure, with resultant slight increase in venous engorgement and dilatation of the superficial veins of the thorax and abdomen as well as of the legs. A slight amount of dependent edema is common. The blood viscosity decreases slightly and the rate of blood flow is accelerated. The pulse pressure is widened, and the similarity of some of the circulatory changes to those seen in arteriovenous aneurysm has suggested the possibility that the placenta acts as an arteriovenous shunt. These significant effects on the circulation in pregnant women with normal hearts are indicative of the strain which pregnancy would add to a damaged heart.

Rheumatic heart disease is the most common type encountered during the child-bearing years. However, the establishment of a diagnosis of rheumatic heart disease in a pregnant woman is only the first step. The presence or absence of activity of the rheumatic fever must be determined, the valvular lesions defined, the degree of cardiac enlargement gauged, and the possibility of complications such as bacterial endocarditis, congestive failure, or serious arrhythmias must be ruled out. The use of an elevated sedimentation rate, a mild anemia, and a slight leukocytosis as indices of rheumatic activity is not tenable in pregnancy, since pregnancy itself may cause such changes. The presence of rheumatic activity is best decided on clinical evidence, although in an occasional instance the electrocardiograph may be helpful.

The recognition of early congestive failure during pregnancy may be difficult because of the resemblance of some of the signs and symptoms of pregnancy to those of cardiovascular insufficiency.

From an address to the staff of the North Detroit General Hospital, October 26, 1948.

Hepatomegaly and persistent moist basal râles are fairly reliable signs of failure in these patients, although the dry râles of basilar atelectasis secondary to elevation of the diaphragms may occasionally be confusing, and the distended abdomen may obscure hepatomegaly.

The differential diagnosis of heart disease and surgical conditions of the chest or abdomen may be notoriously difficult. The right upper quadrant pain and nausea produced by distention of the liver capsule may simulate gall-bladder disease, and the differentiation of myocardial infarction from surgical emergencies of the upper abdomen is too well known to warrant repetition. The abdominal pains of rheumatic peritonitis may be difficult to differentiate from acute appendicitis. Patients with unsuspected thyrotoxic heart disease in whom tachycardia may be the outstanding finding have been thrown into severe thyroid crises by relatively minor surgical procedures.

Having avoided the pitfalls of differential diagnosis, and having arrived at a diagnosis of heart disease in a pregnant woman or a patient with a surgical problem, the decision as to whether to permit the pregnancy to continue or, in the other instance, to operate depends on balancing the need for children or for the operation against the patient's cardiac reserve. Other elements also enter into consideration. For example, it is obvious that of two pregnant young women with mitral stenosis, the one who is sufficiently well endowed with the world's goods to afford a housekeeper, a nurse, and a governess would be a better risk than the one who (other factors being equal) has to work as a waitress or cashier until the last month or two and would have little or no help in caring for the baby after delivery. Also, the contemplation of pregnancy by a nulliparous cardiac patient presents a more trenchant problem than an analogous situation in a multipara.

Similarly, the need for surgical intervention in a middle-aged cardiac patient with auricular fibrillation who develops a mesenteric embolus is obviously urgent as compared with the need for cholecystectomy in a similar patient suffering from intermittent attacks of biliary colic.

In the determination of the patient's tolerance for pregnancy or operation, the best gauge is the history. No laboratory studies yet available offer us as reliable a guide to the patient's cardiac reserve as his ability to engage in physical activity.

The degree of exertion at which the patient with a damaged heart develops dyspnea, fatigue and/or angina is determined from the history. In evaluating dyspnea and fatigue, such factors as age, obesity, pulmonary affections, anemia, et cetera, must also be kept in mind, lest the heart be blamed for more than its share of the disability.

We will be less apt to omit important data relative to the patient's cardiac reserve, if we formulate our diagnoses in systematic fashion. The utilization of the pattern for cardiac diagnosis recommended by the New York Heart Association¹¹ facilitates the description of heart diseases and should be more widely taught and applied. With this system, cardiac diagnoses are classified according to etiologic, anatomic, physiologic, functional, and therapeutic considerations. The functional and therapeutic classifications indicate, respectively, the amount of physical activity the patient *can* engage in and that which he *should* engage in, and are as follows:

Functional Classification:

"Class I. Patients with cardiac disease and no limitation of physical activity. . . . Patients in this class do not have symptoms of cardiac insufficiency, nor do they experience anginal pain.

"Class II. Patients with cardiac disease and slight limitation of physical activity. They are comfortable at rest. If ordinary physical activity is undertaken, discomfort results in the form of undue fatigue, palpitation, dyspnea or anginal pain.

"Class III. Patients with cardiac disease and marked limitation of physical activity. They are comfortable at rest. Discomfort in the form of undue fatigue, palpitation, dyspnea, or anginal pain, is caused by less than ordinary activity.

"Class IV. Patients with cardiac disease who are unable to carry on any physical activity without discomfort. Symptoms of cardiac insufficiency, or of the anginal syndrome, are present, even at rest."

Therapeutic Classifications:

"Class A. Patients with cardiac disease whose physical activity need not be restricted.

"Class B. Patients with cardiac disease whose ordinary physical activity need not be restricted, but who should be advised against unusually severe or competitive efforts.

"Class C. Patients with cardiac disease whose ordinary physical activity should be moderately restricted, and whose more strenuous habitual efforts should be discontinued.

"Class D. Patients with cardiac disease whose ordinary physical activity should be markedly restricted.

"Class E. Patients with cardiac disease who should be at complete rest, confined to bed, or chair."

To illustrate the nomenclature, a patient with a double mitral lesion with congestive failure and auricular fibrillation might be classified as follows:

Cardiac:

Etiologic: Rheumatic fever, inactive.

Anatomic: Mitral stenosis and insufficiency, cardiac enlargement.

Physiologic: Auricular fibrillation, cardiac insufficiency, pulmonic incompetence (Graham Steell murmur).

Functional: Class IV.

Therapeutic: Class E.

Presentation of the diagnosis in such fashion serves as a synoptic clinical and pathologic description of the patient's heart disease, and an estimation of the patient's cardiac reserve.

Prognosis

In attempting to prognosticate the probable course of cardiac patients subjected to an operation or pregnancy, the cumulative effects of the underlying heart disease and of the superimposed complications both must be assessed. Assuming the correctness of the cardiac diagnosis, we have to determine whether the patient's life expectancy is sufficient to warrant undertaking pregnancy or an operation. In general, as we have already remarked, the additional risk imposed by an operation or pregnancy varies directly with the degree of impairment of the patient's exercise tolerance. There is an additional hazard in those patients whose cardiac disease is of such nature that sudden death may occur at any time during its course. Such rapid exodus may occur in arteriosclerotic heart disease with the anginal syndrome or coronary thrombosis, in syphilitic heart disease with coronary ostial stenosis, aortic insufficiency or aneurysm, in rheumatic heart disease with aortic stenosis, and in instances of complete auriculo-ventricular block.

As a general rule we may say that cardiac patients who are in Functional Class II and Therapeutic Class B, or better, are subject to only a very slight increase in risk above patients with normal hearts. Patients in Functional Class III or therapeutic Class C, or worse, involve much more serious risks.

The unremitting strain which pregnancy imposes on the circulation may lead to congestive failure in the patients with a damaged heart. This occurs most commonly in the seventh and eighth

months of pregnancy, when the load on the circulation is heaviest. The initial development of congestive failure is less common in the last month of gestation ("lightening"), at parturition, or in the postpartum period, although in a recently reported series⁴ there were more instances of failure in the last month than in any previous month. Occasionally in the postpartum period, when the uterus is contracting, the expression of blood therefrom into the general circulation acts somewhat like a transfusion and increases the strain on the heart.

Patients with established auricular fibrillation are subject to a high mortality rate during pregnancy. This high mortality is due not so much to the auricular fibrillation *per se*, as it is to the fact that auricular fibrillation is usually seen in rheumatic heart disease of relatively long duration and is a late development in the disease. For similar reasons, patients who have had episodes of congestive failure in the past are poor risks for pregnancy, as are rheumatic cardiac patients who are past thirty years of age. The number of previous pregnancies, the number of recurrences of rheumatic activity in the past, or a history of an embolic episode in the past do not seem to exert any deleterious effects on the prognosis. We often hear it stated that rheumatic cardiac patients who have gone through previous pregnancies without particular difficulty should anticipate no trouble with another contemplated pregnancy. However, like most generalizations, this statement is inapplicable to the individual instance because it ignores the element of progressive impairment which characterizes the rheumatic inflammatory process which caused the valvular lesion. The mechanical embarrassment of the circulation caused by the valvular lesion may have progressed markedly since the patient's previous pregnancies. Particularly is this true of mitral stenosis, which is the most progressive form of rheumatic heart disease.

Bunim and Rubricius⁴ recently reported a series of 131 rheumatic cardiac patients delivered of 133 babies at Bellevue Hospital with an over-all maternal mortality of 1.4 per cent. They surveyed the literature of the previous ten years and found reports of 158 deaths among 4,869 pregnant women with rheumatic heart disease (including their own cases), a mortality rate of 3.24 per cent. In their own series, the infant mortality was more than three times as great in infants delivered of

mothers in failure, as it was in infants delivered from mothers with normal hearts or mothers with rheumatic heart disease but without failure. The combination of mitral and aortic valvular disease seemed to have no more adverse effect on maternal mortality than did mitral valvular involvement alone.

The influence of pregnancy on the course of rheumatic heart disease was analyzed by Cohn and Lingg (quoted in reference⁴), and it was found that "there was no significant difference in the tempo of the clinical course, the rate of development of congestive heart failure, the duration of life from onset of disease to death, and the age at death in the parous and nulliparous groups." Boyer and Nadas² also found that pregnancy appears to have no particular ill effect on the course of rheumatic heart disease. For a thorough and comprehensive review of pregnancy in heart disease, the monograph of Hamilton and Thomson should be consulted.⁸

In the additional risk which an operation imposes on the cardiac patient, the severity of the operation contemplated is only one of the factors which enters into consideration. The skill of the surgeon and anesthetist, their appreciation of the problem presented by the cardiac patient with respect to water and electrolyte balance and bed rest, and their willingness to modify preoperative, operative, and postoperative routines in the best interests of the patient are essential elements. It is important to recall that surgical procedures may reactivate a latent rheumatic fever, that shock, hemorrhage, or dehydration may lead to myocardial infarction in a patient with damaged coronary vessels, that operations on septic foci may lead to subacute bacterial endocarditis in patients with valvular lesions, that overhydration may lead to pulmonary edema and death in susceptible patients, that prolonged bed rest may have detrimental as well as advantageous effects in cardiac patients, and that restriction of respiration by tight upper abdominal dressings may be intolerable to a mildly dyspneic cardiac patient. Even with the current trend toward early postoperative ambulation, the foregoing comment about bed rest deserves some elaboration. Elderly cardiac patients are particularly susceptible to hypostatic pneumonia and to thrombophlebitis with the possibility of pulmonary embolism when restricted to bed, unless precautions are taken against these eventual-

ities. Occasionally, patients with so-called right ventricular failure (edema, hepatic engorgement, et cetera) may develop pulmonary edema as a result of postural fluid shift when they are restricted to recumbency.

Management

The proverbial ounce of prevention is the wisest measure to apply with respect to pregnancy in heart disease. In a patient with signs or a history of congestive failure, or with established auricular fibrillation, or in a patient who has experienced cardiac difficulties with a previous pregnancy, it is best to interdict pregnancy if at all possible. If such a patient insists on becoming pregnant, she should be thoroughly acquainted with the risk both she and the infant run, and with the possibility that she may have to spend most of her pregnancy at rest.

A pregnant woman with rheumatic heart disease should be under the closest observation of her medical attendant, with interviews at weekly intervals through most of her pregnancy, so that the earliest signs of failure can be promptly recognized if they develop, and proper treatment instituted. Upper respiratory infections, gastrointestinal upsets, or overexertion may lead to failure in these patients. Excessive weight gain should be prevented by proper dietary restrictions in order to avoid adding the burden of obesity to the circulation. Properly fitted obstetrical corsets are recommended to minimize the circulatory strain of postural disturbances.¹² Special attention should be given to the prevention of anemia.

The treatment of congestive failure during pregnancy consists of the usual measures of digitalization, sodium restriction, and judicious rest. If diuretics are found necessary, it is probably wiser to use the xanthines or the acidifying salts rather than the mercurial diuretics. If a patient develops failure in the early months of pregnancy, interruption of the pregnancy is indicated after treatment for failure has been instituted. When failure supervenes in the sixth month or later, all attempts should be made to carry the patient through to term or very shortly before, because it may be anticipated that the load on the circulation will lighten during the ninth month. Hospitalization for at least a week or two prior to the anticipated date of delivery is advisable for thorough study and preparation of the patient. Vaginal delivery

rather than abdominal section appears to be preferable, since it is dubious that the surgical procedure entails less hardship for the patient and since the possibility of infection and embolism is increased by an operation. However, there is much difference of opinion on this score, and one of arguments which advocates of surgical interruption have is that patients in whom interruption of pregnancy is indicated for cardiac reasons should be sterilized.

If, during the first stage of labor, the patient develops dyspnea, tachycardia, or other signs of cardiovascular distress, rapid digitalization is indicated, plus supportive measures such as oxygen administration.⁹ The second stage of labor should be shortened as much as is consistent with good obstetrical practice in order to minimize the strain of bearing-down. Patients with mitral stenosis may develop severe pulmonary edema during labor, and venesection (with subsequent slow replacement of the blood if necessary) may be life-saving. A patient who is orthopneic prior to delivery should be placed in a Fowler position on the delivery table. The use of spinal or caudal anesthesia assists in the prevention of pulmonary edema by reducing vasoconstriction in the anesthetized areas and permitting the pooling of blood therein, thus reducing the venous return and simulating the effect we produce when we inflate blood pressure cuffs on the extremities in the "bloodless phlebotomy" we sometimes use in the treatment of pulmonary edema. Intravenous fluids should be used with great caution, if at all, following delivery in cardiac patients.

In dealing with cardiac patients subjected to an operation, preoperative and postoperative medication must be individualized. Patients in congestive failure who require an operation obviously should be restored to the best possible level of cardiac efficiency compatible with the time available. The routine administration of preanesthetic medication without consideration of the patient's age, size, cardiac and renal status is poor medical practice. Barbiturates, morphine, and atropine are the most commonly used preanesthetic drugs. The barbiturates are excellent drugs when used properly, but we must remember that they are excreted mainly by the kidneys. Therefore, in a patient with hypertensive heart disease secondary to arteriolar nephrosclerosis, chronic glomerulonephritis, or obstructive uropathy, or in a patient with

congestive failure, we must be certain that the renal function is adequate to handle the dose of barbiturate administered. Barbiturates should be given sufficiently long in advance of morphine to avoid cumulative depressive action on the respiratory center. Occasionally, patients react with marked excitement to some of the barbiturate preparations, and such reactions must obviously be avoided in cardiac patients if at all possible. Morphine occasionally may produce arrhythmias in susceptible patients as a result of vagus center stimulation, and it may depress compensatory circulatory reflexes called into action by blood loss, but the major effect we must be careful about in cardiac patients is the respiratory depression induced by morphine. Elderly patients are particularly susceptible to morphine and may develop Cheyne-Stokes respiration following its use. Nausea and vomiting sometimes follow the administration of morphine and are hardly conducive to rest. Sometimes, as with the barbiturates, excitement may follow morphine administration. Therefore, in elderly cardiac patients who have to undergo an operation, morphine should be avoided if possible. Atropine may accelerate the heart rate without increasing the cardiac output.

As Blumgart points out in his excellent review of this subject,¹ it is always wisest, if at all possible, to test cardiac patients several days before operation with the drugs that are expected to be used, in order to rule out hypersensitivity or other untoward reactions. The patient should be acquainted with the feel of an oxygen mask so that if oxygen is found necessary postoperatively, the patient will not be panicstricken. Postoperative medication requires even more judicious consideration. Posterior pituitary extract used to prevent or counteract postoperative gas distention has a vasoconstrictor and hypertensive effect, and should be used only with the greatest caution in arteriosclerotic or hypertensive cardiac patients. The institution of intestinal suction and/or oxygen inhalation to treat distention is wiser in these patients. The use of ergot derivatives following uterine curettage in patients who may have coronary artery disease is dangerous, since it may cause angina, probably as a result of coronary constriction. The use of carbon dioxide-oxygen mixtures to accelerate the removal of inhalation anesthetics from the lungs should be avoided in cardiac patients because the carbon dioxide causes

an increased cardiac output, splanchnic vasoconstriction, and a rise in blood pressure. In patients with diabetes and arteriosclerotic heart disease, the metabolic disturbances accompanying surgical procedures add to the difficulties, because excessive insulin may lead to anginal pain or even myocardial infarction.

The choice of the anesthetic agent in cardiac patients requires careful deliberation. Ether is still the most widely used general anesthetic and is probably the most reliable for cardiac patients if high oxygen concentrations are maintained along with the ether. This latter qualification deserves emphasis, because the too widespread habit of slapping a gauze mask on the patient's face and pouring ether thereon may lead to anoxia, with resultant secretion of adrenalin and increase in heart rate and blood pressure. If open-drop ether has to be used, it is a simple procedure to run a tube under the gauze mask from an oxygen tank and let oxygen run in at a rate of about 4 liters per minute, remembering, of course, the enhanced inflammability and explosiveness of ether when mixed with oxygen. Ether may cause arrhythmias, but they are usually of minor nature and due to extrasystoles. The major disadvantages of ether are the nausea and vomiting which usually follow its use as an anesthetic, and the violent muscular efforts of emesis may be harmful to the cardiac patient. Also, the excitement stage during the induction of ether anesthetics may lead to acute increases in the blood pressure.

Chloroform is mentioned only to be condemned. It has no place in anesthesia for cardiac patients, since it is a vasomotor and myocardial depressant, and may precipitate ventricular fibrillation.

Cyclopropane is a pleasant, rapidly acting anesthetic agent, with a high margin of safety, and permits the use of high oxygen concentrations. Its major disadvantage is that it increases myocardial irritability and may cause ventricular extrasystoles or tachycardia. Preanesthetic medication with quinidine may be advisable in patients with cardiac disease who are particularly subject to arrhythmias (e.g., patients with thyrotoxic heart disease). The addition of a small amount of ether to the cyclopropane mixture may also help in minimizing arrhythmias.

Nitrous oxide is a poor anesthetic for use in cardiac patients because partial asphyxia is a necessary component for complete relaxation; how-

ever, it may be useful as a supplementary agent, for example with intravenous pentothal.

Ethylene has but little effect on the cardiovascular and respiratory systems and is pleasant for induction and recovery. However, preanesthetic medication is essential for proper ethylene anesthesia, and the precautions we have mentioned incident to such medication must be observed. In addition, the percentage of oxygen in ethylene-oxygen mixtures for anesthesia is sometimes insufficient for cardiac patients. Ethylene may be used satisfactorily as a supplementary agent in cyclopropane-oxygen mixtures.

Avertin is used for basal narcosis quite frequently in some areas. In addition to the disadvantages inherent in nonvolatility, avertin has a depressant effect on respiration and a marked hypotensive effect.

Intravenous pentothal anesthesia has little effect on the cardiovascular system when properly used. Respiratory depression is not uncommon, however, and the disadvantages of nonvolatility are present here too. Hepatic and renal function should be adequate to insure proper breakdown and excretion of the agent. Small doses of intravenous pentothal may be used advantageously to produce superficial anesthesia prior to administration of inhalant agents.

Spinal anesthesia is an excellent method for cardiac patients, with the possible exception of hypertensive persons. Significant drops in blood pressure can be prevented by the use of ephedrine or parendrine. Of course, the usual precautions have to be observed to prevent respiratory difficulties resulting from diaphragmatic or intercostal paralysis.

Local anesthesia when it can be used would seem ideal, but there seems to be little difference in mortality between local and general anesthesia in cardiac patients.⁵

Thus it is apparent that there is no one ideal agent for anesthesia in cardiac patients. The addition of curare to the anesthetists's armamentarium has permitted muscular relaxation without excessively deep anesthesia. A combination such as nitrous oxide-oxygen by inhalation with intravenous pentothal sodium and curare permits satisfactory anesthesia with adequate oxygen and reduces the amount of pentothal necessary.

The maintenance of fluid and electrolyte balance in cardiac patients postoperatively often poses

delicate problems. Every patient must be dealt with on an individual basis, and general rules can be discussed only vaguely. Too often, patients who are really in need of blood or plasma are given infusions of glucose in saline. Certainly in a patient who is able to take fluids by mouth, intravenous administration is rarely necessary.

Patients with borderline cardiac reserve may be pushed into pulmonary edema or congestive failure by excessive fluid administration postoperatively. Intravenous fluids should not be administered at a rate more rapid than 10 c.c. per minute, since it was found that in patients with impaired hearts the speed at which fluids are given intravenously is the most important factor in the patient's tolerance of the fluids.¹⁰ Our main objective in administering fluids is to maintain the urinary output and to permit vaporization without dehydration, and for these purposes the best fluid to administer is 5 or 10 per cent dextrose in distilled water.⁶

Patients with normal hearts may develop subcutaneous and/or pulmonary edema when given excessive salt postoperatively, and in past decades we have become cognizant of the major role played by sodium retention in the pathogenesis of the features of congestive failure; therefore, we must be exceedingly cautious in the use of saline infusions in cardiac patients. In addition to the hazards of excessive salt, intravenous fluids increase the venous pressure and dilute the plasma proteins, factors which are also conducive to the development of edema.

Certainly, patients who have pulmonary or subcutaneous edema on a cardiac basis may be presumed to have sufficient salt reserves to handle the usual postoperative losses without the necessity for replenishment by intravenous saline. In cardiac patients who have no excessive fluid or salt accumulations, the depletion of salt via sweat, vomitus, diarrhea, drainage tubes or intestinal suction may require active replacement, or the patients may develop weakness, somnolence, muscle cramps and dehydration. In such cases, the best guide to the need for saline is the clinical condition of the patient.

In the prevention of postoperative pulmonary complications, the usual measures to insure adequate pulmonary aeration must be carefully observed. Frequent changes in position, oxygen inhalations, minimal use of restrictive bindings, avoidance of excessive narcosis, bronchial drainage

where necessary and antibiotics may be indicated.

Thrombophlebitic complications should be prevented by frequent massage of the legs, prophylactic venous ligation where necessary, and the use of anticoagulants when contraindications do not exist.

Butler, Feeney, and Levine⁵ reported a series of 414 patients suffering from heart disease who had 494 operations, with but twenty-eight "unexpected" deaths, a mortality of 6.3 per cent. Brumm and Willius³ found a 4.3 per cent mortality from cardiac causes in their group of 257 patients with severe coronary artery disease who were subjected to necessary surgical procedures. Therefore, it is evident that with proper teamwork among the medical attendants, the over-all risk of surgical procedures in cardiac patients is not alarming.

Summary

1. The factors involved in evaluating the cardiac patient as a surgical or obstetrical risk have been reviewed briefly.
2. The most important element is the degree of impairment of the patient's cardiac reserve, a factor which is best determined from the history.
3. Elasticity in modifying the usual hospital routines and proper medical teamwork are essential to the successful management of the cardiac patient.

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Rhinoplasty and Nasal Respiration

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IN THE PAST, rhinoplasty was performed essentially for cosmetic reasons. It has become apparent, however, that the surgeon should not only strive to improve the appearance of the patient, but if internal nasal derangements are present, they should be removed in order to improve nasal physiology and respiration. This is particularly important where septal deflections are found to interfere with breathing.

The indications for rhinoplasty may be classified into (1) physiologic indications, and (2) psychologic indications. Under the former we treat (1) congenitally malformed noses, and (2) malformations due to trauma or disease. The psychologic indications are intimately a part of the restoration of the patient's ego by eradicating the stigma which may have caused the patient tremendous self-depreciation.

False Concepts of Submucous Resection

It has been taught in the past that the septum serves as a means of support, and with its complete removal, either the tip of the nose may drop or saddle nose result, or both. Many surgeons have had such a disheartening experience. For this reason they thought it important to leave, during submucous resection, an anterior buttress of cartilage for support. It has been the belief, heretofore, that when this buttress was left, neither did dropping of the tip result nor did "saddle nose" occur. Patients so operated upon, however, have not enjoyed normal breathing after the surgical intervention. The buttress that remained as a support continued to act as a mechanical obstruction to breathing. The straightening of the deviation posterior to this buttress did not always relieve the symptoms nor accomplish the required end result.

Newer concepts of this subject teach that when the septal deviation is limited to the anterior

buttress of cartilage, the classical submucous resection is of little value in relieving the difficulty in breathing. The patient does not breathe well after this operation because that support which had been untouched surgically still constitutes the obstruction to breathing, and thus respiration remains permanently impaired.

The "saddle nose" which occasionally follows the submucous resection is due to the resultant pull from fibrosis and contraction of tissue four to six weeks after the operation, rather than from



Fig. 1. Routine rhinoplasty performed for hump and hooked nose. (Left) Before operation. (Right) Three months after operation.

the loss of support due to the removal of the cartilage itself. If the saddle nose were due to removal of the cartilage *per se*, then the deformity should arise immediately at the time of surgical removal. The deformity arises from the subsequent contraction and healing.

Submucous Resection by Rhinoplastic Methods

In preparing the patient for operation, the initial topical application on the nasal mucosa with equal parts of 10 per cent cocaine and adrenalin is followed by nerve block anesthesia

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RHINOPLASTY—LEVITT



Fig. 2. (Left) Patient had a prominent hump nose with an extreme frustration complex resulting from the deformity. Routine rhinoplasty was performed, with removal of an exceptionally large hump. (Right) Three months after operation. Patient showed an improved mental outlook and relief from the marked inferiority complex and attendant frustration.

involving infratrochlear, infraorbital, nasopalatine and anterior palatine nerves. The incision is made with a Bard-Parker No. 11 along the edge of the septum where the cartilagenous and membranous septum unite. First, a small piece of cartilage and mucosa are removed as a small sliver of tissue, in order to obtain better visualization. Mucopericondrium is separated on both sides so that the obstruction between the flaps may be removed. Oftentimes the quadrangular



Fig. 3. (Left) Patient had an old nasal fracture with a resultant saddle nose. Routine rhinoplasty was performed, including hump removal, narrowing and shortening of the nose. A hump removed from a patient operated upon one hour previously was inserted to fill in the defect. Patient made an uneventful recovery, and a tremendous improvement in appearance resulted. Penicillin therapy was used for three days. (Right) Three months after operation.

cartilage, the vomerian ridge and the perpendicular plate of the ethmoid are removed. The septal cartilage taken out must be in one piece and intact. This portion is reinserted between the mucosal flaps. It is our feeling that this reinsertion of a straight piece of cartilage prevents the ultimate fibrosis and contraction and is the main reason that saddle nose does not occur in this particular procedure.

A bed is made in the columella for the insertion



Fig. 4. Routine rhinoplasty performed for prominent nose with hump. (Left) Before operation. (Right) Three months after operation.



Fig. 5. (Left) Patient had an old nasal fracture. The hump was removed, the nasal vault narrowed and the nose shortened. (Right) Three months after operation.

of the cartilage with a Stevens scissors. This bed extends from the nasal tip to the nasal spine. All existing fibrous bands must be cut through. Two double-arm silk sutures are then passed through the end of the graft that fits in the columella. The graft is then drawn through the columellar bed and lies between the two flaps of mucosa. The two needles on the posterior suture are passed through the incision into the posterior part of the columellar bed and are passed through the columella and brought out of the nose on its under sur-

face near the septolabial angle. The needles on the anterior suture are passed through the columella near the tip of the nose. The graft now lies between the septal flaps, and the two sutures are used to pull the graft into the columella bed and hold it in place until the fixation sutures are placed. The guide sutures are then cut, and the graft is in its proper place. Vaseline gauze packs are firmly placed against the sides of the septum holding the graft in place (Fomon).

It is by this method of rhinoplastic submucous



Fig. 6. (Left) Patient had an old nasal fracture with a hump and a retracted columella. Rhinoplasty was performed, with hump removal, shortening and narrowing of the nose. A baton of cartilage was inserted in the columella for added support. (Right) Three months after operation. There was marked improvement in nasal respiration.



Fig. 7. Routine rhinoplasty with removal of hump and correction of hanging columella. (Left) Before operation. (Right) After operation.

resection that anterior obstructions may be removed and adequate nasal breathing ensue. The reinsertion of a piece of cartilage insures the patient against a subsequent saddle nose.

Importance of Nasal Physiology in Rhinoplasty

At this point a brief review of the newer concepts of nasal physiology and respiration is in order.

It has become more and more evident to the

rhinologist that deformities of the upper and lower lateral cartilages, especially if associated with deviations of the nasal septum, result in marked nasal obstruction and in poor physiologic breathing. It is therefore easy to understand why in the past ten years the otolaryngologist has accepted as his responsibility the correction of both external and internal nasal deformities which heretofore were uncorrected by cosmetic surgery alone. A nose which looks good but through which the patient



Fig. 8. Routine rhinoplasty with removal of an exceptionally large hump. (Left) Before operation. (Right) After operation. Patient showed an improved mental outlook and relief from a marked inferiority complex and the attendant frustration.

cannot breathe normally is of little comfort to the individual.

Air currents travel in a definite direction on inspiration through the nares between the middle turbinates and septum and then downward through the choanae; on expiration they take the same course but in the opposite direction. Any interference with these air currents inevitably results in symptoms of nasal obstruction. Certainly a deformity either in the cartilaginous vault or the nasal bones will then contribute to interference in the passage of air into or out of the nose. For

example, a too-dependent nasal tip will shunt the air currents to the dorsum of the nose creating eddies at this point. A too-elevated tip will direct the currents of air along the floor of the nose to the choanae.

Still another factor to be considered is the variation in pressure that normally exists in the nose during inspiration and expiration. This varies from minus 6 cm. of water during inspiration to plus 6 cm. of water during expiration. Any abnormality, therefore, in the shape or form of the nares or upper lateral cartilages prevents normal nasal respiration from taking place. Under proper physiological conditions the nares are smaller than the choanae. This aids in building up the negative pressure on inspiration. On expiration the air passing through the choanae meets a resistance as it flows through the narrower nares and so helps maintain a positive pressure. Too wide nares, therefore, results in a drop in the negative as well as the positive pressures. Nares that are too narrow may increase the negative pressure to a point where collapsed alae may result.

Conclusions

1. Any deviation from the normal, both with respect to the maintenance of pressures or time allowed for the mixing of the respiratory gases results in poor physiologic breathing.

2. From the above review of a phase of the physiology of nasal respiration it follows that rhinoplastic procedures correcting dependent or elevated tips, narrow or wide nares, twisted septa and correlated external deformities, including nasal humps, all tend to restore the physiologic functions of the nose. At the same time the operation removes any psychic disturbance which may have resulted from these deformities.

3. Cosmetic correction of external nasal deformities alone does not result in normal nasal respiration.

4. Examples of rhinoplastic procedures are given in which there is correction of both extranasal deformities and intranasal pathology.

5. Rhinoplasty has today become an integral part of the practice of otolaryngology.

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Tennis Elbow

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"TENNIS ELBOW" or epicondylitis of the humerus is characterized by pain over the external epicondyle on grasping and pronating, particularly with the elbow in extension.

The condition is seen more commonly in males than females, with the age incidence highest in the third and fourth decades.

The right elbow is affected more often than the left. Occupations characteristically have much to do with the development of the affliction. Repeated maneuvers in which the extensor conjoined tendon is put on a stretch, by grasping and pronating against resistance in the extended position, initiate symptoms, e.g., in pipe fitters, leather workers, press operators, painters, carpenters, surgeons, and athletes. Pulling on a heavy wrench or screwing on bone plates may produce the condition. Volleyball players and meat-carvers have been seen with involvement of the common flexor tendon of origin arising from the medial epicondyle. Medial epicondylitis (in the author's experience) occurs about 10 per cent as often as lateral epicondylitis.

Anatomy

The extensor carpi radialis brevis arises from the lateral epicondyle of the humerus by a tendon common to it and the extensor digitorum communis, extensor digiti quinti proprius, and extensor carpi ulnaris. Beneath and posterior to it is the supinator, which has a tendinous origin from the posterior part of the lateral epicondyle and overlies the radiohumeral joint. The radial collateral ligament lies deep to the supinator and is intimately blended with its tendon of origin. A radiohumeral bursa is found in less than 10 per cent of dissected cadavers. When present, it lies deep to the conjoined tendon, but extends to the joint capsule directly over the radiohumeral joint.

The pronator teres, flexor carpi radialis, palmaris longus, flexor carpi ulnaris, and flexor digi-

TABLE I.

Sex Incidence:	Males	Females
Cases	53 (84%)	10 (16%)
Age Incidence:	Age	Cases
	20-30	6
	30-40	18
	40-50	29
	50-60	8
	60-70	2
		Total: 63 cases
Elbow Involved:	Right	Left
Cases	45 (71%)	18 (29%)

torum sublimis, comprising the superficial group of flexor muscles, take origin from the medial epicondyle of the humerus by a common tendon similar to the common extensor tendon.

Pathology

No known finding to date will explain the symptoms, completely. (1) It is postulated, however, that in the majority of instances, those individuals having tenderness over the epicondyle have an incomplete tear in the fibers of the conjoined tendon. This has not been confirmed by either gross or microscopic findings. (2) A second group of extra-articular cases presents roentgen findings. Kohler described spur formation extending distally from the lateral epicondyle. This or a localized periosteal reaction is occasionally seen if routine x-rays are taken. (3) A third group is the condition of radiohumeral bursitis, which in the inflamed state has been described by Hunt and Stack as a small pea-sized mass of granular and areolar tissue plus fat, lying deep to the conjoined tendon. (4) A fourth group, also described by Hunt and Stack, is made up of intra-articular lesions consisting of inflamed synovial membrane, frayed or detached portions of the orbicular ligament, or even roughening of the articular margin of the semilunar fossa or radial notch.*

Symptomatology

In the majority of cases, patients complain of pain over the epicondyle (Groups 1 and 2) on grasping and pronating. This is most marked with the elbow extended. Most will claim that they were injured by striking the elbow against an obstruction; however, they are unable to exhibit or recall definite discoloration or abrasion of the skin. Ten per cent of the patients in our experience complained of pain on supination as well as on pronation. Five per cent complained of numbness extending to all the fingers. Weak-

*A similar condition is occasionally seen involving the insertion of the triceps brachii and the quadriceps femoris muscles.

ness of grip is usually seen in the more severe cases and may become so marked that the patient is unable to grasp a tumbler. The condition may come on acutely within a day or two, but more frequently, it begins insidiously, gradually increasing in severity.

TABLE II. DURATION OF SYMPTOMS PRIOR TO DIAGNOSIS

Time	Cases
1-7 days	10
1-2 weeks	19
2-4 weeks	15
1-2 months	15
Over 3 months	4
Average: 3½ weeks	Total: 63

On examination, complaint of tenderness is elicited in a sharply localized area over the anterior aspect of the epicondyle in the first two groups, just distal to it or over the radiohumeral joint in the third group, and over the head of the radius in the intra-articular lesions. (In medial epicondylitis, the tenderness is localized to the medial epicondyle.) These patients characteristically have free range of motion. No discoloration or other evidence of contusion or abrasion is evident. Swelling is rarely present except in intra-articular involvement, where it is not an outstanding feature.

Treatment

Treatment depends on the severity of the condition. In mild or early acute cases, the patients are instructed in the use of heat on the elbow followed by gentle massage. A sling may be worn; however, it has been our practice to instruct these patients to work with their elbows close to their bodies, not to reach and grasp or do any motion which causes pain. Some writers advocate plaster immobilization, e.g., the use of a cock-splint (Watson-Jones), or splinting the forearm in neutral with the elbow at ninety degrees (Stack and Hunt).

In the more chronic and severe cases, manipulation under local anesthesia may be employed. The diagnosis can be confirmed by complete temporary relief of symptoms on thorough injection of a 1 or 2 per cent solution of novocaine into the origin of the conjoined tendon. Mills advocated extending the elbow fully while the forearm is pronated and the wrist and fingers flexed. Sir Watson-Jones advocates a procedure used successfully by English bonesetters: "The elbow is

held fully extended with one hand over the outer side of the lower forearm, the other hand over the inner side of the joint. The joint is sharply adducted in such a way as to open it on the outer side, first with the forearm supinated, then in the mid-position, and finally with the forearm pronated. Clicks or snaps may or may not be elicited. Active exercises are immediately initiated and if necessary, the manipulations are repeated without anesthesia every fourth day until relief is complete." Cyriax has described a similar maneuver. The patients under our care have been advised to work with the elbow close to their sides until the condition is relieved.

TABLE III. END RESULT STUDY OF TREATMENT

Treatment	Successful			Unsuccessful	
	Cases	Per Cent	Average Time in Weeks	Cases	Per Cent
1. Heat, massage, working with elbows close to sides	20	90.9	3.0	2	9.1
2. Manipulation (novocaine anesthesia)	31	77.5	3.4	9	22.5
3. Roentgen therapy	2	50.0	3.5	2	50.0
4. Surgical	9	100.0	4.3	0	00.0

No correlation was found between duration of symptoms and time necessary for relief of the condition.

Roentgen therapy consists of 1200 r, measured in air, in divided doses over two to three weeks.

Surgical treatment is performed under local anesthesia. A one and one-half inch oblique incision is made over the lateral humeral epicondyle. The conjoined tendon of the extensor muscles is identified and incised widely at its origin from the lateral epicondyle. A bursa is looked for. (Dwyer and Murray advocate extensive periosteal stripping over the epicondyle.) Mouchet advocates removal of paraepicondylar osseous proliferations. Travernier suggests sectioning of the nerve supply to the radio-humeral joint area. Allen and Stack and Hunt open the joint capsule, carry the forearm through a complete range of movement to visualize any thickened redundant synovial membrane or detached orbicular ligament, and remove the offending tissue.

All patients studied in this series who had no permanent relief following conservative treatment by the first two methods received relief either by roentgen therapy or by incision. Only one patient refused further treatment than manipulation—his

(Continued on Page 1004)

Venous Thrombosis and Pulmonary Embolism

Prophylaxis, Diagnosis and Treatment

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R.R. LINTON, M.D.

DURING THE past decade a great deal of attention has been focused on the problem of venous thrombosis and pulmonary embolism. Both the internist and the surgeon have come to realize the direct relationship between these two conditions. With the reduction in the mortality rate from

serious infections and major surgical procedures, the importance of preventing death from massive pulmonary embolism has become more obvious, especially since it is now realized that the problem is not an insurmountable one. Instead of the attitude of the majority of the medical profession in the past that there is little that can be done to prevent fatal embolism, considerable advance has been made in recent years regarding the etiology, prophylaxis, diagnosis, and therapy of thromboembolic disease. However, much is yet to be learned, since, unfortunately, deaths still occur; in fact, according to pathologists' statistics, the incidence of fatal pulmonary embolism in the autopsy room is still about as high as it was ten years ago.²⁰ The direct relationship between deep venous thrombosis of the lower extremities and pulmonary embolism is well recognized. Most authorities agree that 95 to 98 per cent of pulmonary emboli arise in the deep veins of the legs. The recent opinion expressed by Cummine and Lyons,⁸ that many instances of pulmonary infarction arise due to primary thrombosis in the pulmonary veins, has not, as yet, been proved.

The terminology of deep venous thrombosis is somewhat confused in the literature. Ochsner and De Bakey¹⁸ have popularized the term, "phlebothrombosis," for that type which does not produce any inflammatory condition in the ex-

trinity and from which most instances of fatal embolism arise. Homans¹² has termed this type "bland venous thrombosis." Another appropriate term, which the author has suggested, is "silent venous thrombosis." Whether there is much difference between this type and the usual so-called "thrombophlebitis," where there is marked evidence of local inflammation in the extremity along the deep venous system, is still somewhat undetermined. It is our opinion, however, that there probably is relatively little difference except in the age of the process. There is no question that in the silent type of thrombosis or so-called "phlebothrombosis" embolism is much more apt to occur than in the patient with the inflammatory thrombophlebitis, as pointed out by Ochsner and De Bakey¹⁸ and Homans,¹² since in the former the thrombus is very loosely attached and may be readily dislodged to produce embolism, whereas in the latter it is intimately adherent to the vein wall and is less likely to result in embolism. The therapy, in our opinion, should be the same irrespective of the type, since massive embolism may occur even in the so-called "obstructing" type of thrombophlebitis.

There are a number of factors which explain the apparent increase in thromboembolic disease and, therefore, the lack of improvement in the statistics of fatal embolism as seen in the autopsy room in any large clinic. It has been clearly demonstrated that most pulmonary emboli, both lethal and non-lethal, occur in patients over forty years of age. In a survey of medical patients by Carlotti et al.,⁶ 83 per cent were over forty years of age, and in a group of surgical patients reported by Allen et al.,² 81 per cent were over forty years of age. Due to the fact that there has been an increase in the life span of man during the past decade or two, more patients in the older age group are being admitted to the hospital, especially for operations on malignant disease, so that the incidence of thromboembolism has risen. These operations also, in many cases, are of greater magnitude than a decade or two ago. At the Massachusetts General Hospital the mean age of patients admitted to the surgical wards has increased from thirty-six years in 1930 to forty-four years in 1945. In addition, fewer patients are dying as a result of surgical shock, and it is now rare to have a patient succumb to a serious infection such as peritonitis or pneumonia, so that the critically

Presented at the eighty-third annual session of the Michigan State Medical Society, at Detroit, September 23, 1948.
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ill patients are living longer following surgical procedures and therefore are more prone to thromboembolic disease.

Diagnosis

Despite all the literature that has been written concerning this subject during the past decade, many physicians and surgeons fail to recognize the early signs of the disease and, as a result, wait until a full-blown femoroiliac thrombophlebitis or so-called "phlegmasia alba dolens" has developed before instituting therapy. In other cases massive embolism may occur when the early signs of phlebitis may have been present but not recognized. The ideal that everyone is working for, of course, is the prevention of venous thrombosis in all patients. Since it seems unlikely that this Utopian state will ever be fulfilled, because in many instances the disease begins spontaneously without evident cause, it therefore seems important to stress the early signs and symptoms of deep venous thrombosis of the lower extremities. This seems especially indicated since minor pulmonary embolism may occur in about one patient in twenty-five with deep venous thrombosis of the lower extremities, according to a series of patients reported by Welch and Faxon;²² one out of four of these died from massive embolism, a mortality rate in this group of 25 per cent.

One of the most important and useful methods of detecting early venous thrombosis of the lower extremities is the early examination of both legs for swelling and tenderness. This simple fact seems hardly worth mentioning, but it is surprising how few physicians and surgeons pay any attention to the legs during a long illness or in the postoperative period following a surgical procedure. This is because the most common signs of early deep venous thrombosis of the lower extremities are swelling of the lower leg and tenderness to palpation over the deep veins of the calf. An analysis of over 500 cases at the Massachusetts General Hospital reveals that these two signs were present in about 65 per cent of the cases. Discomfort in the calf or popliteal region, on forceful dorsiflexion of the foot, the so-called "Homans' sign," was present in 41 per cent. Distention of the superficial veins over the lower leg and foot, as compared to the normal extremity, is another useful sign although less frequently present. A concomitant rise in temperature, pulse

and respiration, in a patient with a preceding normal chart, when no other cause can be found, is frequently evidence of a small pulmonary embolus and an early phlebitis. One of the most important signs in our experience, even though local evidence of thrombosis in either extremity cannot be determined, is the occurrence of a non-fatal pulmonary embolus. In the above series it was found to be present in 35 per cent of the patients. Since, according to our statistics, fatal pulmonary embolism is more likely to occur following a warning non-lethal embolus, the diagnosis of minor embolism is extremely important so that measures can be taken to prevent death from massive embolism.

The sudden development of a severe pleuritic type of pain, especially if it is followed by hemoptysis, is almost pathognomonic of pulmonary infarction and deep venous thrombosis of the lower extremities. Roentgenographic examination of the chest in suspicious cases is an important aid in diagnosis. A roentgenogram taken at the bedside with a portable x-ray machine is practically useless for diagnostic purposes. It is recommended, therefore, if a roentgenogram is to be taken it should be done with the standard equipment in the x-ray department. Both anteroposterior and lateral views should be taken routinely, the latter to visualize better the lower lobes.¹⁰ If possible, it is also advisable to fluoroscope the chest, as a small infarct may be detected by this method that otherwise would be missed on the film. It is also worth pointing out that the majority of pulmonary emboli lodge in the lower lobes. An analysis by Allen et al² revealed that in a series of 111 cases 97 per cent lodged in the right and left lower lobes, so that these locations should be especially examined. Phlebography of the deep veins of the lower extremities has been given up as a routine procedure in our clinic because the interpretation is often equivocal, especially in the early diagnosis when it would be most valuable. In addition, one of our patients with bilateral negative phlebograms succumbed forty-eight hours after they were done from a massive pulmonary embolus arising from the deep veins of one of the lower extremities.

Prophylaxis

Thromboembolic disease cannot be prevented in all patients. Even in the postoperative group it

occurs despite utilization of all the modern methods now available. It develops most frequently in postoperative patients following major abdominal operation, especially for malignancy; other conditions in which it often appears are trauma and fractures of the lower extremity, severe infection such as pneumonia and typhoid fever, pregnancy, and severe cardiac disease. In addition, as already stated, Allen et al,² writing in reference to surgical patients, and Carlotti et al,⁶ referring to medical patients, have pointed out that in each group over 80 per cent of thromboembolic disease occurs in patients beyond forty years of age. In view of these facts, prophylactic measures are especially indicated in patients presenting the above conditions who are over forty years of age.

Certain general measures are indicated to encourage the venous return of blood from the lower extremities in order to prevent it from stagnation which seems to favor thrombosis. Passive and active bicycle exercises for bed patients when possible are of definite benefit. In addition, it is recommended that the head of the bed should be elevated on blocks under the bedposts so that the patient is lying on a slight incline with the head and chest above the level of the legs, similar to the position recommended by Frykholm.¹¹ A board is placed at the foot of the bed so that the patient can push against it with his feet as he or she tends to slide down in the bed. This automatically results in exercise and contraction of the calf muscles, thus favoring the emptying of the veins where thrombosis most commonly originates. It is believed this position is better than the Trendelenberg, which is most commonly recommended because it actively stimulates the venous circulation. Anything which puts pressure on the popliteal space, such as raising the lower part of the bed under the knees or placing pillows in this region, should be avoided, especially in patients confined to bed for long periods.

Other measures, such as the proper fluid and electrolyte balance, are well enough understood so that they only need mentioning. Special attention, however, should be directed against allowing abdominal distention to persist since it increases intra-abdominal pressure and so interferes with venous return from the legs. Tight abdominal binders should never be used for the same reason. Early ambulation, even after major abdom-

inal operations, is an important prophylactic measure. This means that the patient should be gotten out of bed on the first or second postoperative day and made to walk about the room, and not allowed to sit in a chair for at least a week, because the sitting position favors venous stagnation and thrombosis. Abdominal incisions should be made and sutured so that the patient may get out of bed within one or two days after an operation without danger of wound disruption.

The anticoagulants, heparin and dicumarol, are of chief value in the prophylaxis of venous thrombosis rather than in the actual therapy of it, in our opinion at the present time. The former has not proved to be of so much value in our clinic as the latter, chiefly because of the difficulty of administration, despite its advantage of rapid action. The Swedish surgeons, Bauer,⁴ Crafoord⁷ and Zilliacus,²³ however, have apparently used it with considerable success, and in this country Murray and Best¹⁷ and Loewe et al¹⁵ have recommended its use. Since the introduction of dicumarol, however, this drug has come more and more into favor because of its relative cheapness and the fact that it can be administered by mouth. The chief drawbacks to its use are that after administering it there is a forty-eight-hour delay before it produces an effect on the coagulability of the blood, and not all patients respond alike to the same dosage. Furthermore, laboratory facilities and a technician for performing prothrombin measurements are absolutely essential to guard against an overdosage. Dicumarol has been used in our clinic in 647 surgical patients between the ages of forty and sixty-five years of age, up to June 1, 1948.¹ The average dose used in these patients was 200 milligrams, and the drug was administered within forty-eight hours of the operative procedure. Occasionally a larger dose was used, and in some patients resistant to the drug multiple doses were necessary to obtain the desired effect. The percentage of thrombosis in the group of patients treated in this manner was reduced by 80 per cent in comparing them with a similar group that did not receive the drug. A bleeding tendency developed in a few, and two patients died as the result of hemorrhage, one from bleeding following a prostatectomy, a patient who probably should not have received a drug, and another from a cerebral hemorrhage, the latter occurring fourteen hours after the dicumarol was administered so it

may not have been the cause. Twelve patients developed phlebitis and fourteen others pulmonary infarcts while receiving it. These were treated by bilateral femoral vein interruption. No fatalities from massive pulmonary embolism occurred in the group of 647 patients who received this combined form of prophylactic therapy.

It has been our opinion that the aged patient is more subject to the hemorrhagic complications following the anticoagulant therapy, so that in those patients over sixty-five years of age subjected to major surgical procedures another form of prophylaxis has been carried out. This procedure consists in prophylactic interruption of the superficial femoral veins. It was not performed until many hundreds of femoral veins had been interrupted in patients with established deep thrombosis and we had satisfied ourselves that the extremities would not be permanently damaged by such a procedure. The rationale of it is to interrupt the long venous channel from which the vast majority of fatal pulmonary emboli arise. It is performed preferably at the same time as the major operative procedure or within a few days thereafter. The level of interruption has been the superficial femoral vein just distal to the deep femoral vein. It is difficult to state how many lives may have been saved by this method, but in two comparable series of 871 patients each, one with and the other without the benefit of this procedure, there were only four deaths from fatal embolism in the former, whereas there were thirty-seven deaths in the latter. These figures certainly speak for themselves and the advisability of this form of prophylaxis. Since instituting this method of treatment, it is only fair to state that 950 patients have been subjected to it at the Massachusetts General Hospital up to June 1, 1948. In this group there were four deaths from massive embolism. The thrombus in two of these patients arose from the iliac veins at a higher level than the point of interruption. It is obvious from these statistics we do not at the present time have a method of prophylaxis which will protect every patient from thromboembolism and the danger of death either from hemorrhage or pulmonary embolism.

Mahoney and Rise¹⁶ have recommended prothrombin time determinations of every patient, thereby being able to select for treatment those patients whose prothrombin time becomes notably reduced during the first postoperative week. A

somewhat similar procedure has been recommended by Cummine and Lyons.⁸ They recommend a postoperative coagulation graph and estimations of the plasma fibrinogen B, to determine what they term as the "pre-thrombotic state." They recommend, if it is found, treatment with heparin and/or dicumarol in positive cases. The results do not appear to be outstanding, since they report forty-eight cases of leg thromboses and forty-one of pulmonary thromboses treated with anticoagulants. Two deaths occurred in the pulmonary thrombosis group, and in both thrombosis of the legs was present. It seems obvious, however, that further investigations along these lines should be carried out.

Treatment

The conservative treatment of a well-established case of deep venous thrombosis, with rest in bed, elevation of the extremity, and the application of hot and cold packs, should no longer be acceptable except in the unusual case because it does not protect the patient from fatal pulmonary embolism. Injection of the lumbar ganglia with procaine solution frequently gives symptomatic relief, as recommended by Oschner and De Bakey,¹⁹ and it seems to shorten the period of hospitalization but does not eliminate the danger of pulmonary embolism. The anticoagulants, heparin and dicumarol, have also been used, but in our hands not infrequently after they have been discontinued both minor and fatal pulmonary emboli have occurred. The statistics of Cummine and Lyon⁸ and Borgstrom⁵ recently published would also tend to bear this fact out, since the former reported two deaths from massive pulmonary embolism in eighty-nine patients with thrombosis and the latter reported seven deaths from the same cause in patients who received heparin and dicumarol therapy after thromboembolism developed.

The more radical treatment by means of bilateral femoral vein interruption, with or without thrombectomy, depending on whether a thrombus is present in the femoral vein, as performed in our clinic, has been found to greatly shorten the course of the disease and in most cases has prevented fatal embolism. This method was first described by Homans¹⁸ in 1934. The first case in our hospital was treated by this method in 1937. Since then, we have interrupted one or both femoral veins in 1,332 patients up to June 1, 1948,

as a therapeutic method of treatment of deep venous thrombosis and pulmonary embolism. The chief indications for this method of therapy are: (1) the occurrence of a non-fatal pulmonary embolus in a patient whether or not there are signs of venous thrombosis in the legs; (2) the development of venous thrombosis in the deep veins of the lower extremity, as evidenced by tenderness, pain, swelling, dilated superficial veins, or discomfort in the calf or popliteal space when the foot is passively dorsiflexed; (3) a concomitant rise in temperature, pulse and respiration in a postoperative or medical patient who has had a previously normal chart and in whom the elevation cannot be explained by some other cause; (4) if venous thrombosis is diagnosed in one extremity, the femoral vein of the other leg should be interrupted in all cases even though no signs of venous thrombosis in it are detected.

The technique of the surgical procedure has been described previously as it is performed in our clinic.^{3,14} It should be pointed out that in the hands of a surgeon accustomed to large blood vessel surgery it is a simple procedure, but for the average surgeon it may be fraught with considerable danger, due to the fact that severe bleeding may be encountered from injuring the femoral vein, and as a result the femoral artery may be irreparably damaged with resulting loss of the limb. For this reason, it is of utmost importance that a surgeon who contemplates utilizing this method should familiarize himself very thoroughly with the anatomy of Scarpa's triangle. Another practical point is the fact that if a thrombus is present in the common femoral vein it is advisable to interrupt this vessel rather than the superficial femoral vein since a thrombus may reform, and if the interruption is not proximal to the profunda femoris, a fatal embolus may arise from this vessel. It is important, however, that the interruption, especially in the aged patient, should not be proximal to the saphenofemoral junction, since in a few patients the saphenous vein may be the only collateral channel through which blood can return from the leg and serious consequences may result, as reported by Dennis.⁹

From practical experience it has also been found that it is impossible to do a thrombectomy satisfactorily in the patient who has had a phlegmasia alba dolens, with swelling up to the groin that has persisted for over forty-eight hours. This is because the thrombus becomes so adherent to the

intima of the vein that it cannot be removed. Interruption of the venous system at a higher level, such as the inferior vena cava, may be necessary in certain cases. This has been done in thirteen instances in our clinic, indicating that we use it only in the rare and unusual case. It is our opinion it should be reserved for those patients who have septic pulmonary emboli arising from a septic process in the pelvis or in an unusual case of thromboembolic disease in which there is a femoroiliac thrombosis of several days' duration with pulmonary embolism. Inferior vena cava interruption is preferable to bilateral common iliac vein interruption, because the venous systems from both extremities may be interrupted through a single exposure. The extraperitoneal approach is recommended. A number of incisions can be used to expose this large blood vessel, but a right paramedian incision, retracting the rectus muscle lateralward, and the ureter, peritoneum and its contents medialward from the iliac fossa, is recommended.¹⁴ Interruption of the inferior vena cava has always been carried out in continuity, since it is difficult to mobilize sufficient of this large vessel to ligate and divide it safely. It is a major surgical procedure, requiring general or spinal anesthesia in contradistinction to femoral vein interruption which is done under local anesthesia as a rule. It is our opinion that it should not be used routinely for the treatment of thromboembolic disease since it may carry a relatively high mortality, as shown by the figures reported by Thebaut and Ward.²¹ In the group of thirty-six patients, they reported that four died, a mortality rate of 11 per cent. Two succumbed on the operating table and the other two soon after completion of the operation.

Conclusions

1. The problem of thromboembolic disease has not been solved as yet, and with the span of human life steadily lengthening, the incidence of it is rising.
2. The morbidity and mortality of the disease can best be reduced by the early diagnosis of it and the use of prophylactic measures, including anticoagulant therapy and bilateral femoral vein interruption.
3. Bilateral femoral vein interruption has proven to be a satisfactory method of therapy in early cases of deep venous thrombosis of the lower

extremities, by preventing death from massive embolism in most cases.

4. A combination of bilateral femoral vein interruption and anticoagulant therapy should be used when deep venous thrombosis is complicated with a non-lethal pulmonary embolism.

5. Further investigations are indicated to determine the patients who may develop thromboembolic disease, since in this way only will it be possible to prevent deaths from massive pulmonary embolism in patients with the silent type of venous thrombosis.

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TENNIS ELBOW

(Continued from Page 998)

elbow was painful one and one-half years later, being aggravated by bowling.

Conclusions

1. Sixty-three cases of "tennis elbow," studied during the period 1946 through 1947, are analyzed.
2. Conservative measures, consisting of heat, massage, rest, and avoidance of motions causing discomfort, are generally successful. These measures are particularly successful in treating medial epicondylitis.
3. Manipulation under local anesthesia was successful in 77 per cent of the cases wherein it was used.
4. Roentgen therapy was 50 per cent successful in four cases.
5. Incision of the conjoined tendon was successful in eight cases that had proven resistant to other forms of therapy and in one case where it was the only therapy employed.

The author wishes to express his appreciation to Dr. Robert H. Denham and Dr. Charles H. Frantz, whose help and co-operation made this paper possible.

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MSMS

Cancer is one of the oldest known diseases. Earliest historical writings describe it and many fossils show signs of its presence.

* * *

Unreasoning fear is one of the greatest obstacles to cancer control.

* * *

Cancer becomes a serious disease only when neglected.

* * *

How big a start did your last cancer patient get on you, and whose fault was it?

JMSMS

Surgery of Portal Hypertension

Portacaval Shunts and a Two-Stage Method in the Poor-Risk Patient

By Robert R. Linton, M.D., and
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MASSIVE bleeding from the esophagogastrintestinal tract, secondary to cirrhosis of the liver, so-called Banti's syndrome, is a serious threat to a patient's life. Medical therapy has little to offer these patients, as is demonstrated by the following statistics: Shull¹⁶ recently analyzed 131 patients with esophageal varices admitted to the Massachusetts General Hospital from 1935 to 1944. There were 108 cases secondary to cirrhosis of the liver. Forty-one of these patients died from massive hemorrhage, a mortality rate of 38 per cent. During the same period there were twenty cases of Banti's syndrome, and five of these patients succumbed for the same reason, a mortality rate of 25 per cent. None of these patients had the benefit of surgical treatment.

Many surgical procedures have been performed and recommended in an attempt to prevent death from hemorrhage in patients with these diseases. They can be divided into three groups for the purposes of analysis: (A) Reduction of portal bed arterial inflow. (B) Reduction of blood flow through esophageal varices. (C) Reduction of the portal hypertension by anastomosis of the portal venous system to the general systemic venous system, the so-called "shunt" or "by-pass" operation.

Group A

Two methods have been advocated: (1) ligation of the splenic artery, (2) splenectomy. Ligation of the splenic artery has been recommended because it reduces the portal arterial inflow by as much as 40 per cent in cases of splenomegalia. It was first reported by Blain⁸ in 1918, and again by

Watson²¹ in 1935, Alessandri¹ in 1938, Berg and Rosenthal² in 1942, Linton¹² and Everson and Cole¹¹ in 1948. The latter authors have recommended this surgical procedure, especially for the poor-risk patient. Portal venous pressures taken before and after ligation and division of the splenic artery and splenectomy have revealed an immediate reduction in some cases. How long the reduced pressure is sustained has not been determined. In the case reported here, following interruption of the splenic artery, the pressure was still low at the end of one month when the shunt operation was performed. However, an analysis of the cases of ligation of the splenic artery reported in the literature reveals only moderate success by this procedure.

Splenectomy is one of the more common methods of treatment, especially for Banti's disease. It is recommended for the same reason as interruption of the splenic artery, that is, it reduces the portal arterial inflow and at the same time it also interrupts some of the veins feeding the esophageal varices. In our clinic, esophagogastrintestinal bleeding has been relieved only temporarily in patients treated in this manner. Some have had repeated hemorrhages within a year and others have had a respite for a few years, but practically all of them have bled again, and in many cases the bleeding has been massive. This data is being collected on these cases at the present time.

In view of these observations, it became obvious to us, since splenectomy and ligation of the splenic artery both reduce the portal hypertension essentially to the same degree but apparently only temporarily, that neither was an adequate form of surgical therapy, and that some more permanent method to reduce the portal pressure should be developed.

Group B

Various methods have been utilized to reduce the amount of blood flowing through the esophageal varices. The purpose of such procedures is to prevent hemorrhage from these overdistended blood vessels. One of the methods consisted in the transabdominal ligation of the left gastric vein and the veins in the subdiaphragmatic region at the junction of the esophagus and the cardia of the stomach. Walters, Rowntree and McIndoe¹⁹ first reported this method of therapy in 1929. Walters et al,¹⁸ in 1940, reported only moderate

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Presented at the eighty-third annual session of the Michigan State Medical Society, at Detroit, September 23, 1948.

improvement in a few patients. Observations in our clinic indicated that the benefit derived has been only temporary, and in view of the like reports from other clinics, the results presumably have been the same.

A somewhat similar and logical method to reduce the blood flow in the esophageal varices was advocated by Churchill and Sweet⁷ in our clinic, in which ligation of the periesophageal veins was performed through a transthoracic and transpleural exposure. It was carried out in four patients without permanent benefit. Splenectomy was performed in three of them at the same operation, and even this combined form of therapy was disappointing because of such temporary benefit from severe esophagogastrintestinal bleeding.

The third method consisted of a direct attack on the esophageal varices by injecting them with a sclerosing solution, as first reported by Crafoord and Frénckner⁸ in 1939 and later by Walters, Moersch, and McKinnon¹⁸ in 1940. The esophageal varices are visualized in esophagoscopy so that the solution can be injected directly into them. This form of therapy was developed as a result of its use in the treatment of varicose veins of the lower extremities. The chief advantage of it is that it does not require a major surgical operation to carry it out. The results have been far from satisfactory, since just as with this treatment for varicose veins of the lower extremities, the incidence of recurrence is very high, and in a few instances massive hematemesis has occurred shortly after the injections were performed. It seems, therefore, that this form of therapy should be limited to the occasional patient in an effort to stop the esophageal bleeding in order to improve his condition so that a more direct surgical attack on the portal hypertension, such as some form of a portacaval shunt, can be performed.

A fourth procedure has been advocated recently by Phemister¹⁵ to reduce the blood flow through the esophageal varices. It is a formidable operation, consisting of resection of the lower end of the esophagus and the cardia of the stomach with re-establishment of the esophagogastric tract by an esophagogastrostomy. This method, as the others, does not seem to promise a great deal, as one of the two patients so treated had a massive hemorrhage within a year after the operation.¹⁴ Perhaps further studies should be made, but since the portal hypertension *per se* is not affected, it

seems doubtful that this method will prove efficacious.

A fifth method has been advocated by Wangensteen,²⁰ who has attacked the problem by performing a total gastrectomy and an esophagojejunostomy. He has offered the explanation that esophagogastrintestinal bleeding results from erosion of the esophageal mucosa over the varices due to peptic ulceration, and the elimination of the acid secretion of the stomach by total gastrectomy prevents this from occurring. Be this as it may, it seems not unlikely that the good results he has obtained may be due to reduction of the portal arterial inflow, secondary to interruption of all the gastric arteries, and, in addition, to the reduction of the blood flow in the esophageal varices by division of the esophagus, which necessarily interrupts the venous channels between it and the stomach.

In summary, it may be said of all the methods discussed so far that none attacks directly the cause of the esophageal varices, that is, portal hypertension, so that except in a rare case where there may be an obstruction of the splenic vein following trauma, in which case splenectomy alone will cure the patient, the best that can be expected of any of them is a temporary respite from the esophagogastrintestinal bleeding. The ones that seem to offer at least some palliation are ligation and division of the splenic artery, splenectomy, and total gastrectomy. It is believed that the value of these procedures lies chiefly in the reduction of the portal arterial inflow and a temporary drop, at least, in the portal venous pressure, and at the same time a diminution in the blood flow, and possibly also the venous pressure, in the esophageal varices.

Group C

A new vista in the treatment of the baffling condition of portal hypertension has appeared in recent years. The chief credit for this must go to Whipple²² and Blakemore and Lord⁵ for renewing our interest in shunting blood around the barrier in the portal bed which may be either extrahepatic or intrahepatic. Ever since Eck,¹⁰ in 1877, first reported the successful performance of an anastomosis between the portal vein and the inferior vena cava in dogs, it has been the hope of the clinician and the ambition of the surgeon to create such a by-pass in the patient with portal

hypertension. Numerous attempts were made in the early part of this century. Some of these were reported, but probably many more, because of failure, were not. Due to the inability of performing a satisfactory direct shunt, attention was directed to the indirect type, known as the Talma-Morison operation or omentopexy. The first one was performed by Morison⁹ and later popularized by Talma.¹⁷ It was hoped by this procedure to create numerous small collateral anastomoses which would allow blood to flow through the omental veins into the veins of the anterior abdominal wall, thereby developing new channels, through which the portal blood could escape into the systemic venous system without having to traverse the esophageal veins. Again, many of these operations have been performed, both in our clinic and in others, but the results on the whole have been disappointing, chiefly due to the fact that the portal hypertension is not reduced sufficiently to take the load off the esophageal varices. Cates,⁶ in 1943, analyzed 117 consecutive cases of cirrhosis of the liver treated purely by medical therapy and thirty-eight cases in which omentopexy had been performed. This study revealed that 72 per cent of the medically treated patients died within one year and 68 per cent of the ones subjected to omentopexy died within a similar period. Such results certainly do not recommend this form of surgical therapy, and today it has been practically abandoned in all clinics.

For the past three years, in our clinic, direct venous shunts have been performed in patients with portal hypertension. These have consisted of the following types of venous anastomoses: (1) the splenic vein and the left renal vein, (2) the portal vein and the inferior vena cava, (3) the superior mesenteric vein and the inferior vena cava, (4) the inferior mesenteric vein and the left adrenal vein, (5) the inferior mesenteric vein and the left ovarian vein.

The results to date have been extremely encouraging in those patients in whom a satisfactory anastomosis was obtained, but necessarily a further period of observation is required to determine the true value of this form of therapy. The recent perfection by Blakemore and Lord⁴ of blood vessel anastomoses by the non-suture technique, using vitallium tubes, restimulated surgeons in attacking the problem of portal hypertension. Whipple²² and Blakemore and Lord⁵ were the first to report

a group of patients in which this method of venous anastomosis was utilized to produce portacaval shunts. They describe two types of shunts: (1) an end-to-end anastomosis between the splenic vein and the left renal vein, with a splenectomy and a nephrectomy at the same operation, and (2) an end-to-side anastomosis between the end of the portal vein and the side of the inferior vena cava. In our clinic, we have modified the splenorenal type of anastomosis by preserving the left kidney and performing an end-to-side splenorenal shunt. One of the chief advantages of this modification is obvious, since the left kidney is spared. It is also recommended because it produces a partial shunt of the portal blood flow so that the liver is not completely by-passed, and from our observations on the portal venous pressure before and after performing the shunt, it appears to lower the portal hypertension satisfactorily. For a further discussion of this phase of the subject, the reader may refer to the recent article from our clinic.¹³

Portacaval shunts have been performed at the Massachusetts General Hospital on twenty-seven patients with portal hypertension. The first one performed was in March, 1945, by Richard H. Sweet. An analysis of these cases reveals that the portal bed block was intrahepatic in seventeen patients and extrahepatic in ten patients. The ages of the former group ranged from twenty-seven to sixty years with a mean of forty-five years, whereas in the latter, they were from six to sixty-five years, with a mean of twenty-nine years.

Numerous types of portacaval shunts have been performed in the twenty-seven patients. Summarizing them, it is found that twenty (74 per cent) have been splenorenal shunts, three (11 per cent) portacaval, two (7 per cent) superior mesenteric to inferior vena cava, and one each of inferior mesenteric to left renal vein and left ovarian vein. Six patients died following the operation, a mortality rate of 22 per cent. The anastomosis was considered unsatisfactory in two patients. For this reason, there are only nineteen patients with satisfactory venous shunts. This group includes seventeen splenorenal anastomoses, one superior mesenteric to inferior vena cava and one direct portal vein to inferior vena cava. The results of this type of surgical therapy have been encouraging to date, because only one of the nineteen patients, in whom a splenorenal anastomosis

was performed, has bled from the esophagogastrintestinal tract since the operation. This occurred twenty-six months following the procedure. The longest period of observation since operation without bleeding has been over three years. These results are especially gratifying since several of the patients had had previous types of operations performed, such as splenectomy, omentopexy, ligation and division of the left gastric and coronary veins, ligation of the periesophageal veins through a transthoracic exposure, and several patients had had numerous injections of the esophageal varices with a sclerosing solution. At the present writing, however, it is too soon to state whether or not these patients have been cured until they have been observed for a longer period, especially since eleven of them were operated on between January and July, 1948.

The splenorenal shunt was used in most instances because it produces a partial shunt of the portal blood flow so that the liver is not completely by-passed, and at the same time, in our experience, it seems to reduce satisfactorily the portal hypertension, as determined by measurements of the portal venous pressure before and after the formation of the shunt. Another important reason for using it is that in six patients in this group an attempt was made to perform a direct portacaval anastomosis, and in each case the procedure had to be abandoned because of the extreme vascularity in the gastrohepatic ligament, which prevented the exposure of the portal vein. Patients, especially in the extrahepatic group, who had had a previous splenectomy, presented a difficult problem because the splenic vein could not be found, and the portal vein in five out of six of these patients could not be isolated because of the so-called "cavernomatous" change in the gastrohepatic ligament. For this reason, a superior mesenteric vein to the inferior vena cava anastomosis was performed successfully in one patient, and an inferior mesenteric to the left renal and an inferior mesenteric to the left adrenal vein were used in the two others. The latter have only given temporary benefit, presumably because of the small size of the veins used. In two of the splenectomized patients, despite multiple attempts, no satisfactory vein in the portal system of either of them has been found with which to construct a satisfactory shunt. For this reason, as previously pointed out,¹² it is believed that any surgeon who

does a splenectomy for portal hypertension should perform a splenorenal anastomosis at the same operation, since this may be the only opportunity to construct a satisfactory shunt. There were six patients who died following the operative procedure, so that the operative mortality rate for the twenty-seven patients has been 22 per cent. If this figure is broken down, it is found that no operative deaths occurred in the ten patients with the extrahepatic type of portal bed block or Banti's syndrome and that all the six deaths occurred in the intrahepatic or cirrhotic group. One patient died as the result of postoperative thrombosis of the hepatic artery following a direct portacaval anastomosis. This undoubtedly was a technical error resulting from trauma to the blood vessel at the time of the operation. It was in part, at least, due to the difficulty encountered in isolating the portal vein because of the increased vascularity in the gastrohepatic ligament. Another patient died from esophagogastrintestinal hemorrhage and renal failure following an attempt at anastomosing the superior mesenteric vein and the inferior vena cava. In this case, the shunt was not a satisfactory one, but due to a previous splenectomy and the cavernomatous change in the region of the portal vein, it was necessary to resort to this type. Four patients died, it is believed, from liver failure. In three of them, uncontrollable postoperative hemorrhage from the site of the operation played a role in the fatal outcome despite careful preoperative preparation, including the correction of prothrombin levels in the blood and the use of multiple citrate and direct blood transfusions, preoperatively, postoperatively and during the operations. It is interesting that the bleeding tendency did not manifest itself for the first two hours of the operation, but thereafter a continuous capillary ooze developed and persisted through the remainder of the procedure. Since the usual time to complete one of these operations is approximately four hours, it is very important to have an adequate supply of blood to prevent surgical shock from blood loss, and in a number of cases autotransfusions have been utilized with benefit. Ether was used as the anesthetic in all these patients, administered through an endotracheal tube.

It is worth while drawing attention to the fact that all six of the patients who died were poor surgical risks and the operation was performed on

most of them as a last resort to prevent death from esophagogastrintestinal hemorrhage. It is to be emphasized therefore that a portacaval shunt should never be considered an emergency life-saving procedure, since the critically ill patient cannot withstand such an extensive operation. Of interest, also, is the fact that five of the deaths occurred early in the series, whereas only one patient has died in the last eleven patients operated upon. Considering only the cirrhotic patients, there has been but one death in the last ten of these patients subjected to the procedure. The improvement in the recent mortality statistics undoubtedly is due to several factors. In the first place, the technical procedures of the operation have become more familiar, so that it has been possible to shorten the time of the operation. A more careful selection of the patients also has been made, so that those who are obviously too depleted are prepared until they are in better condition, or they are not operated upon if they obviously will not withstand the procedure.

More recently a two-stage operative procedure has been advocated in the poorer risk patient, suggested first by one of us (I.B.H.). The performance of the splenorenal shunt as a two-stage surgical procedure has, it is believed, probably saved the life of one patient and made it possible to perform successfully a functioning portacaval shunt. In view of the fact that many of the cirrhotic patients are what one might consider poor surgical risks, it seems worth while to draw attention especially to this type of surgical approach to the problem of portal hypertension. The first stage consists of interruption of the splenic artery by ligation and division as it courses along the superior border of the pancreas. A left paramedian upper abdominal incision is made. The lesser peritoneal cavity is opened by dividing the gastrosolic ligament to expose the splenic artery in this location. The paramedian abdominal incision is utilized in order to minimize the abdominal adhesions that will be encountered in the left upper quadrant at the second stage, and thus facilitate the splenectomy and splenorenal anastomosis. Extreme care must be taken in isolating the artery not to tear the splenic vein because in order to control the bleeding from it under such circumstances, the vessel would be so damaged that it undoubtedly would preclude the performing of a satisfactory splenorenal shunt at the second

stage. This technical error, of course, would be especially disastrous to the patient who has the cavernomatous change in the gastrohepatic ligament, which makes it impossible to perform a direct portacaval anastomosis. After interrupting the splenic artery, a biopsy of the liver may be taken for diagnostic purposes. It is also interesting and of some value to measure the portal venous pressure before and after interrupting the artery, and again at the second stage before and after the splenectomy and the construction of the splenorenal shunt, as was done in the case reported here.

Despite the somewhat optimistic report of Everson and Cole¹¹ in regard to the treatment of portal hypertension by interruption of the splenic artery, it is believed advisable to consider this only as a temporary measure, and that after the patient's condition has improved, a splenectomy and a portacaval shunt should be performed. The period between the stages will probably vary somewhat for each patient, depending on the rate of improvement in each case. The chief indication, it is believed at the present time, for the two-stage type of operation, is continued and uncontrollable bleeding from the esophagogastrintestinal tract in a depleted patient, especially with poor liver function.

This type of procedure has been performed satisfactorily in a fifty-year-old white man, with cirrhosis of the liver and continued esophagogastrintestinal bleeding. In spite of fourteen transfusions of 500 c.c. each during twenty-three days in the hospital, it was only possible to raise his hemoglobin from 6.3 gm. to 9.7 gm. Accordingly, the splenic artery was interrupted through a transabdominal left paramedian incision, opening the lesser peritoneal cavity by dividing the gastrosolic omentum. Some difficulty was encountered in isolating the splenic artery, but this was finally done without damage to the splenic vein. The artery was doubly ligated and divided between the ligatures. It is of interest that the portal venous pressure before interruption was 37.5 centimeters of normal saline solution, and after interruption it was 28.5 centimeters. A biopsy of the liver was also taken, which revealed portal cirrhosis. The patient withstood the operation well, and four days following it, the esophagogastrintestinal bleeding ceased. The hemoglobin rose rapidly to 12 gm. and remained there without further trans-

fusions. He was readmitted to the hospital one month later, and through a combined thoracoabdominal incision, as has been previously described,¹³ a splenectomy and an end-to-side splenorenal shunt were performed. Again, the patient withstood the operation surprisingly well and was discharged home from the hospital fifteen days later. It is interesting to note, also, that the initial portal venous pressure at the second stage of the operation was 23 centimeters of saline solution, and following the completion of the splenorenal shunt it had dropped to 14 centimeters. This decrease in the portal pressure is gratifying and reveals that the splenectomy and splenorenal shunt have reduced the portal hypertension at least temporarily almost to a venous pressure within normal limits.

Discussion

Shunting of the portal blood by means of various types of portacaval anastomoses seems at the present time to offer the patient with portal hypertension the best form of treatment. In our clinic, the majority of the patients have had a one-stage splenectomy and an end-to-side splenorenal shunt performed through a thoracoabdominal incision. The results to date in eighteen of the nineteen patients in whom a satisfactory anastomosis was performed are very encouraging, but obviously a further period of observation of these patients is necessary to evaluate the procedure. Because of a relatively high mortality rate in the patients with cirrhosis of the liver, especially those who are badly depleted, it is now recommended that the formation of the splenorenal shunt should be performed in two stages, the first one consisting of ligation and division of the splenic artery, and the second stage a splenectomy and an end-to-side splenorenal shunt.

A number of factors have contributed to the successful results obtained in recent years in the performance of these extensive operations, as compared to the earlier attempts thirty-five years ago. The preoperative condition of the patient frequently can be improved by multiple transfusions, human albumin, intravenous glucose, and also protein in the form of amigens, and diet, and vitamins. Following the operation, the same measures are frequently used with great benefit, and, in addition, special attention is directed toward the proper fluid and electrolyte balance. Great advances have also been made in anesthesia so that the anesthetic

may be given more safely for long periods and, frequently to facilitate the operative exposure, a combined thoracoabdominal incision may be utilized without jeopardizing the patient's condition. An all-important factor has been the development of better surgical techniques, including such factors as finer instruments and especially the fine braided silk on atraumatic needles with which to perform the venous anastomoses. The modern development of the blood bank has also played an important part. These operations cannot be performed safely without having multiple transfusions available during the procedure. In addition there undoubtedly has been an improvement in the surgeon's technique, chiefly the result of the factors noted above, since they permit him time to perform the meticulous type of operation that is necessary without haste in these patients.

Conclusions

1. The recent development of portacaval shunts in the treatment of portal hypertension at the present time seems to provide the most effective method for controlling bleeding from the esophageal varices in patients with cirrhosis of the liver and so-called Banti's disease.
2. In the seriously ill patient, it is recommended that a two-stage procedure be utilized, the first stage consisting of ligation and division of the splenic artery, and the second consisting of splenectomy and splenorenal end-to-side anastomosis.
3. It is also suggested that ligation and division of the splenic artery could be used as a first-stage procedure for a direct portacaval anastomosis, if this type of shunt proves to be the more desirable.

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(Continued on Page 1031)

Arteriovenous Shunts for Revascularization of Ischemic Limbs

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DECREASED ARTERIAL blood supply to the lower extremity is common, and the usual methods used to increase arterial blood flow have not been uniformly successful in our experience. We have used repeated paravertebral blocks,^{3,4} etamon,² intravenous ether solution⁶ and lumbar sympathectomy, either alone or more frequently in combination, without too spectacular success except in a few instances. The generally disheartening results, especially in cases where areas of gangrene are present or impending, impelled us to seek other more direct means for attacking the problem of poor arterial blood supply to the legs and feet.

Claude Beck has shown rather conclusively that ischemia of the heart following ligation of the coronary vessels could be prevented by utilizing the coronary veins for carrying arterial blood.¹ After a visit to Dr. Beck's laboratory we were able to prove to our satisfaction in our own laboratory that adequate coronary arterial blood could be supplied through the coronary veins. This procedure in effect produces an arteriovenous anastomosis between the aorta and the coronary sinus. The principle of using an intact vein to carry arterial blood to a part otherwise poorly supplied appeared to us to offer a direct attack on the problem of decreased arterial blood supply to the legs and feet.

Before such a procedure could be utilized, it seemed important to determine whether arteriovenous effects such as described by Holman⁵ would occur. In a series of nine dogs, three-limbed arteriovenous shunts were prepared between the femoral or iliac artery and their corresponding veins, and no acute arteriovenous effects were noted. In 1924, Holman⁵ wrote his fundamental work on this problem and showed experimentally that in arteriovenous fistulas the blood cellular and plasma volumes are increased and that if the fistula was large the volumes would increase to

such an extreme as to be incompatible with an efficient cardiac output. It is this increased load which is the etiology of the associated right heart failure. Doctor Holman's fistulas were four-limbed—proximal and distal arterial and venous limbs. Arteriovenous fistulas constructed by us are three limbed—proximal and distal arterial limbs and a distal venous limb. Cardiac size is some measure of the load volume a heart is subjected to. When the proximal artery of a four-limbed fistula is clamped, the cardiac silhouette returns to a normal preoperative size, but when the proximal vein is clamped, the heart silhouette becomes smaller than the normal original size, thus clearly demonstrating that there is no acute increase in cardiac load with a three-limbed fistula. In the dogs thus far studied, there has been no increase in plasma or cellular volumes. However, the duration of these experiments has been short, and we do not know whether anastomotic veins may dilate to produce, in effect, a four-limbed anastomosis with later cardiac enlargement. Therefore, the body's immediate response in a three-limbed fistula is not an increase in blood volume, and there appears to be no immediate risk of cardiac failure.

If the arterial blood shunted into the venous system does not go directly into the afferent veins, it must proceed into the distal limb via the venous route. Clinically, this is apparent by the increased warmth of the shunted leg and proven by the thermocouple which always shows a 2° to 3° rise in temperature. That such retrograde flow is possible anatomically can be shown on arteriography as a column visualized down the venous pathway, even though the venous valvular system is opposed to such a flow.

The technique which we have used in the human is an end-of-vein-to-side-of-artery anastomosis at the level of the superficial femoral vessels below the entrance of the profunda femoris vein. An evertint intima-to-intima anastomosis is easily accomplished here, and as an elliptical segment of the artery is removed, no impediment is offered to the flow of blood from the artery to the veins.

Up until this time we have operated upon nine patients. All of these patients were considered to have peripheral arterial decrease of such extent that amputation seemed necessary or appeared imminent. We felt in each instance that we had only possible gain through the shunting procedure

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since, if communicating veins between the superficial femoral veins and the profundus or saphenous veins produced, in effect, a four-limbed arteriovenous anastomosis, the shunt could be tied off, and the result would be no different than that of the commonly employed superficial femoral vein ligation. Of these patients, five were arteriosclerotic patients with symptoms of ischemia or evidence of gangrene present. Of the non-arteriosclerotic patients, one had Buerger's disease with a large gangrenous slough which normally would have required an amputation. However, after a shunt, the man's lower leg was saved. A second man had had a large popliteal aneurysm removed without re-establishment of the continuity of his vessel, with subsequent development of areas of dry gangrene in the lower leg and foot. After his shunt, he had no further progression of the gangrene. The third non-arteriosclerotic patient was a young man with gangrene of both feet and the lower leg to the mid-calf region, which had followed frostbite and immersion of his feet in hot water. A shunt was done on one side, and the sharp line of demarcation previously present receded three inches. However, this may have been due only to superficial damage, with subsequent recession of his gangrenous level to an area indicating more complete damage to deeper tissues.

Of the five arteriosclerotic patients, four had dry gangrene of either the foot, leg or complete limb, and shunts in these patients were technically difficult because of the uniform finding of a severe chronic inflammation about and within the large vessels and because of thrombosis of the artery, the thrombi being difficult of removal. Only one of this group did not have gangrene, but clinically had severe ischemic symptoms and crippling claudication. A shunt was possible on only the least severe of the two legs, and in this leg the pain was relieved and the claudication improved by distance testing.

The ninth case was to us our most encouraging one, making us hopeful of the soundness of this procedure. The patient was a young man who developed sudden pain in his right leg with swelling and severe tenderness in the calf and foot. Examination revealed no palpable peripheral pulses in this foot, with coolness of the foot and early ischemia of the great and second toes. There were areas of superficial skin necrosis over the dor-

sum of the foot and the middle of the leg, and a palpable mass in the popliteal fossa with strange popliteal pulsation. The patient had an exploratory operation four days after this sudden onset of symptoms, and an aneurysm of the popliteal artery, with occlusion of it and the anterior and posterior tibial arteries, was found. An end-to-end arteriovenous shunt between the femoral artery and popliteal vein was accomplished. Postoperatively the patient's leg became warm, and the pain decreased after twenty-four hours, at which time all but the distal one-half of the great and second toes and the small area on the mid-leg had become normal in appearance and feeling. One month after operation he had only a small residual ulcer over the second toe, an ulcer on the first toe being completely healed. At present, the involved leg and foot are pinker than the normal, especially when the leg is dependent. The patient can move all parts of the leg and foot, but there still remains a slight difficulty in dorsiflexion of the foot. The residual evidences of damage are improving, and the patient is able to walk on the foot. This would seem to indicate that arterial blood is reaching and being utilized by the tissue even though it makes its entrance via the venous system.¹

The results in this group with hopelessly involved extremities have not been brilliant but have offered definite advantages. The legs have become warmer, and the spread of gangrene has been controlled. No attempt was made to select these cases except on the basis that no other help could be offered them. The immediate effects of the shunt have been good. While we do not expect later cardiac sequelae, we are following up these patients carefully. We shall continue to study them until we can be sure no late detriment ensues. In the interim we are continuing to choose only those cases in which gangrene is already present or appears imminent. Further laboratory studies are under way in order to explore the physiologic and morphologic changes associated with these shunts, especially in reference to their use in cardiac vascular and peripheral vascular abnormalities.

I wish to thank Dr. Charles G. Johnston, professor of surgery, Wayne University College of Medicine, and director of surgery, City of Detroit Receiving Hospital, for suggesting this problem to me and for his criticisms and help in carrying it out.

(References on Page 1028)

Office Treatment of Lesions of the Cervix

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ALTHOUGH it is one of the smallest structures of human female anatomy, the uterine cervix often is a hazard to general health and all too frequently becomes a threat to life. Fortunately, however, many of its lesions are amenable to office treatment. In this discussion, certain of the lesions which may be encountered will be reviewed, detailed attention will be given to their proper diagnosis, and methods of treatment which may be accomplished in the office will be outlined (Table I).

Developmental lesions usually are anomalies of the Mullerian ducts. These should be recognized and search made for the frequently associated anomalies of the intrapelvic genitalia and urinary tract. Their treatment, generally, is surgical. Erosion, frequently confused with ectropion and ulceration, is a developmental defect in which there is a crowding of the columnar epithelium of the cervical canal onto the portio vaginalis with displacement of the stratified squamous epithelium. This produces a velvety red areola about the external os. Such erosion, often termed pseudo-erosion, is seen in the virginal female, and unless there is an infectious involvement of the glands, no treatment is required.

Traumatic lesions result most commonly from childbirth, although some, such as strictures of the endocervix, may be produced by injudicious treatment of cervical lesions. Laceration is an inevitable consequence of vaginal delivery and distinguishes the parous woman. Routine inspection of the cervix following delivery is commonly urged, and when properly done it should be no cause of infection. The cervix always should be inspected with good light and adequate exposure following precipitate labors and deliveries, operative deliveries, and whenever there is unusual bleeding following expulsion of the placenta. Small lacerations heal with little or no cervical deformity. More extensive lacerations generally will produce deformity if not repaired. Coaptation of the torn edges with interrupted sutures tied lightly is easily

TABLE I. LESIONS OF THE CERVIX UTERI

Lesion	Diagnostic Aids	Treatment
A. Developmental		
1. Mullerian duct anomaly	Inspection and palpation	Surgical
2. Erosion	Inspection and biopsy	None or cautery
B. Traumatic		
1. Laceration	Inspection	Cautery, tracheloplasty
2. Ectropion	Inspection and biopsy	Cautery, tracheloplasty, conization
3. Nabothian cysts	Inspection and biopsy	Cautery, tracheloplasty, conization
4. Stricture	Instrumentation	Graduated dilatation
C. Neoplastic		
Benign:		
1. Myoma	Palpation and biopsy	Surgical
2. Polyp	Inspection and biopsy	Removal, cautery
3. Endometriosis	History and biopsy	Surgical
4. Metaplasia	Biopsy	Repeated biopsy
5. Leukoplakia	Biopsy	Surgical
Malignant:		
1. Epidermoid carcinoma	Biopsy	Radiation
2. Adenocarcinoma	Biopsy	Radiation
D. Infectious		
1. Gonorrhea	Smear and culture	Penicillin systemically
2. Syphilis	Dark field and biopsy	Anti-syphilitic
3. Tuberculosis	Biopsy	Surgical
4. Granuloma inguinale	Tissue smear and biopsy	Antimony, streptomycin
5. Chancroid	Skin test and biopsy	Sulfonamides
6. Condyloma acuminata	Inspection and biopsy	Hygiene, cautery, podophylin
7. Monilia	Fungus in NaOH spread	Gentian violet, propionate jelly
8. Trichomonas	Organism in wet smear	Arsenic and silver salts, cautery
9. Nonspecific bacterial	Elimination	Douches, jellies, cautery

accomplished. Ectropion or eversion is a rolling out of the endocervical columnar epithelium and stroma, produced by infection and facilitated by lacerations. Nabothian cysts form by occlusion of the lumina of the mucus secreting glands. Careful postnatal examination and early treatment of discovered lesions usually will restore the cervix to normal and prevent the development of the severely infected and hyperplastic cervixes which require radical surgical treatment. Lacerations, ectropion, and Nabothian cysts usually can be treated by the actual cautery in the office. When severe, conization or tracheloplasty is required and necessitates hospitalization. Strictures of the endocervical canal occasionally are found in conjunction with severe infection and with neoplastic involvement but more often result from improper cauterization or incomplete after-care following cautery, conization or other operative procedures on the cervix. They are best treated by preventing their occurrence. Graduated dilatation is curative for minor degrees of stricture. Severe occlusive strictures are major surgical problems.

Neoplastic lesions as a rule are not to be treated in the office. However, they must be recognized and diagnosed, since error here may lead to regret-

table results. Myomas and endometriosis are rare but should be kept in mind whenever there is significant enlargement of the vaginal cervix. Polyps are often found but malignant change is uncommon. Unfortunately, genital bleeding too often is attributed to the discovered polyp and no further examination made. Thus, a coexisting endometrial or cervical carcinoma may be overlooked. Genital bleeding should never be accepted as due to a cervical polyp until malignant neoplasms are eliminated as a cause. Cervical polyps most usually arise from the endocervix. They should be removed and sent for histological examination. Small polyps may be twisted off with forceps or removed with a tonsil snare. Large polyps with an accessible base may be removed with cautery, but this is more safely done with hospital facilities. Recurrence of cervical polyps calls for dilatation, curettage, and light cauterization of the canal under anesthesia, definitely a hospital procedure.

Metaplasia and leukoplakia are benign changes of the epithelial cells, the first being a transformation of columnar epithelium into squamous epithelium, frequently a part of the healing process of traumatic and infectious lesions. However, with unusual cellular hyperactivity it is difficult at times to distinguish it from malignant change. Leukoplakia usually has marked epithelial hyperactivity and is more closely related to early malignant lesions. The definitely malignant neoplasms, epidermoid carcinoma which arises from the squamous epithelium and adenocarcinoma which arises from the columnar epithelium, constitute almost 90 per cent of genital malignancy in the female. Because of this high incidence and because of the regrettable inability to obtain satisfactory end results except in the very earliest cases, carcinoma of the cervix must be kept in mind constantly.

Infectious lesions which may involve the cervix may be divided into four groups. First is the venereal group, including gonorrhea and syphilis. The granulomatous group is second and includes tuberculosis, granuloma inguinale, chancroid and condyloma accuminata. Third are those infections usually secondary to a vaginitis, such as monilia and trichomonas infections. The fourth group is the nonspecific bacterial infection, probably the most frequent type of infectious lesion. These infectious lesions usually are amenable to office treatment.

TABLE II. CERVICAL BIOPSY

- | |
|--|
| A. Performed to establish, rarely to confirm, diagnosis |
| B. Only certain means of insuring nonmalignant lesion |
| C. Always biopsy: |
| 1. Suspicious lesions |
| (a) Small area resembling granulation tissue which bleeds readily |
| (b) Small polyp |
| (c) Small ulcer |
| (d) Small leukoplakic spot |
| (e) Small hard area covered by normal appearing epithelium |
| 2. Whenever bleeding occurs from the cervical stump |
| 3. Normal appearing cervix with history of post-coital or post-traumatic bleeding |
| 4. Lesions with previous negative biopsy which fail to heal with adequate treatment. |
| D. Technique: |
| 1. Thorough bimanual and visual examination |
| 2. Application non-staining antiseptic to portio and external os |
| 3. Probe cervical canal—dilate if stricture or bleeding is encountered |
| 4. Take adequate tissue from squamo-columnar junction or edge of lesion |
| 5. Small sharp curet to obtain specimen from canal after dilatation |
| 6. Remove base along with polyp |
| 7. Gauze pack to control bleeding |
| E. No treatment until diagnosis is fully and unequivocally established |
| F. Continue observation until lesion is completely healed |

How are these cervical lesions to be managed? How shall they be treated in the office? No treatment of any disease should be attempted without first having arrived at an acceptable diagnosis. The gross appearance of the various cervical lesions will not be described. They are well illustrated in any standard gynecological text, and a brief study of these will make their recognition a matter of intelligent observation. The simple and innocuous lesions are readily diagnosed; the difficult and serious lesions require laboratory aid in their diagnosis. In no other situation is the biopsy more informative and more easily obtained.

Taking a cervical biopsy is a painless procedure and it can be done rapidly with a minimum of equipment. This simple means of arriving at a definite diagnosis is not utilized with the frequency it deserves. Because often it is not properly performed, it shall be considered in detail (Table II). It should always be kept in mind that the biopsy is performed to establish, rarely to confirm, the diagnosis of the lesion. It is the only certain method of insuring that it is not malignant. Biopsy should always be resorted to whenever there is the slightest doubt regarding the nature of the cervical lesion. Pregnancy is no contraindication to biopsy. Many clinical carcinomas have been overlooked because the cervix was not examined when bleeding or spotting occurred during pregnancy.

All lesions which evoke the slightest suspicion of malignancy must be biopsied. Guerriero and Mantho, in a series of 123 patients on whom biopsy

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was done because of suspicious appearing lesions, found the following.²

Cervicitis	79 cases	64.0%
Carcinoma	24 cases	19.4%
Adenocanthoma	3 cases	2.5%
Cervical polyp	3 cases	2.5%
Cervical myoma	3 cases	2.5%
Granuloma inguinale	3 cases	2.5%
Leukoplakia	2 cases	1.6%
Metaplasia	2 cases	1.6%
Tuberculosis	2 cases	1.6%
Tertiary syphilis	1 case	0.8%
Chancroid	1 case	0.8%

In this group, twenty-seven patients had a definite malignant lesion, four had lesions with malignant potentialities, two had lesions which require radical surgical treatment, five had lesions for which specific therapy is available. The remaining eighty-five lesions were amenable to office treatment.

One should regard with grave suspicion any area on the cervix which resembles granulation tissue and which bleeds when touched with an applicator—the possibility of its being malignant is great. Almost equally suspicious are small ploys, small ulcers, and small leukoplakic spots—malignant invasion may already have started. When palpation discovers a hard area on the cervix, it also should be biopsied even though covered by normal appearing epithelium. Biopsy should always be done whenever bleeding occurs from the cervical stump. A recent study revealed that in 46 per cent of such patients the bleeding was caused by carcinoma.¹ Post-coital bleeding and bleeding which follows douching, instrumentation, or walking are other imperative indications. Unfortunately, bleeding is a late symptom in 30 per cent of all cervical carcinomas. Last on the list of situations in which biopsy is mandatory are those lesions which previously have been biopsied and no malignancy demonstrated, and which fail to heal despite adequate treatment. It should be an inflexible rule that when biopsy does not discover malignancy, both the patient and the lesion should be kept under constant observation until the lesion is eradicated or healed.

Biopsy should always be preceded by a careful general and thorough pelvic examination. The external genitalia should be systematically inspected and palpated and the intrapelvic genitalia palpated bimanually through both the vaginal and

rectal canals. Examination of the cervix begins with vaginal and rectal palpation and is completed by visual examination with good illumination, utilizing the speculum. Discharge present in the fornices, on the portio, as well as in the vaginal canal, should be collected and studied by wet and stained smears and, as indicated, by other laboratory methods. Excess discharge must be removed so that the entire field can be inspected carefully. The mucus plug extruding from the external os is easily removed with saturated sodium bicarbonate solution. After all local discharge has been removed, apply a non-staining antiseptic. Probe the cervical canal with a uterine sound to determine its patency or the presence of endocervical lesions, suggested by the appearance of blood or pus at the external os following such instrumentation. If such occurs, a pyp or adenocarcinoma may be present, and the canal should be dilated and carefully examined. Biopsy is facilitated if the cervical canal is dilated before the specimen is taken.

The technique of biopsy is simple. A biopsy forceps, scalpel, or scissors may be used. For endocervical lesions a small sharp curette is very useful. Always take a generous portion of tissue from the lesion, including adjacent, apparently healthy tissue. Most epidermoid carcinoma begins at the squamocolumnar junction and this area should be included in the specimen. When suspicion of malignancy is strong, biopsies should be taken from both lips or, more preferably, from each quadrant of the cervix. When polyps are removed a section of the base should be included since malignancy is most apt to be found here. After the tissue has been removed, it should be placed in a fixing solution, such as 10 per cent formalin, and sent to a competent gynecological pathologist for diagnosis. One should be certain that the specimen is adequate, and one should not be deterred by bleeding. Bleeding can be controlled by packing with oxidized cellulose or iodoform gauze. It is best to avoid applying the cautery to the biopsy area since this will distort the remaining tissue to such an extent that if further biopsy is requested, if the lesion is of questionable malignancy, a proper specimen may not be obtained until invasion has progressed considerably. Similarly, treatment should not be undertaken until the nature of the lesion is fully and unequivocally established. The Philadelphia Committee for the Study

of Pelvic Cancer in the one-year period from December, 1945, to December, 1946, encountered 116 cases of unwarranted delay in the diagnosis of pelvic cancer.³ In seventy-eight instances this was due to "physician delay" and in the remaining thirty-eight cases to "patient and physician delay." Moreover, thirty-one of these 116 patients whose symptoms were highly suggestive of uterine carcinoma were not examined but were merely treated with oral or hypodermic medication. If the results in the treatment of genital malignancy are to be improved, the diagnosis must be established early in the disease.

The infectious group of cervical lesions are the most common and are readily amenable to treatment in the office. Specific systemic therapy is available for those of the venereal group. Acute gonorrheal cervicitis, diagnosed by history, substantiated by the results of the Gram stain smear, with or without culture, is best treated with penicillin—300,000 Oxford units in oil given daily for three days. Syphilis of the cervix, demonstrated by dark field or biopsy, should be treated by general antisyphilitic measures, including the arsenicals and bismuth in conjunction with penicillin. Tertiary syphilitic lesions should be treated with caution to avoid cardiovascular and visceral complications.

The granulomatous lesions are infrequently encountered in private practice. Tuberculosis of the cervix is rare and usually is preceded and accompanied by adnexal and endometrial involvement, necessitating radical surgical extirpation. Granuloma inguinale is a common lesion in the Negro and does involve the cervix. Diagnosis is made by demonstration of Donovan bodies in the tissue smear or biopsy. Treatment includes penicillin and sulfonamides systemically, sulfonamide powder or jellies locally, and antimony compounds, such as fuadin, 5 c.c. three times weekly for four to six weeks. Streptomycin recently has been reported as effective. Chancroid, a highly infectious lesion caused by *Hemophilus ducreyi*, is uncommon. Treatment includes sulfonamides both systemically and locally for seven to ten days. Condylomata accuminata often accompanies a severe nonspecific cervicitis. Local hygienic measures and the healing of the cervicitis by cautery frequently produces gradual disappearance of the warty excrescences. Those which remain can be destroyed by the cautery when they are on the

cervix, or by electrodesiccation or 20 per cent podophylin in oil or tincture of benzoin elsewhere in the lower genital tract. Occasionally the lesion may be so extensive that surgical excision under anesthesia is required.

Monilia infections of the cervix always have an associated vaginitis. The gross appearance with the characteristic white flakes on the reddened edematous mucosa is unique, and the diagnosis is easily confirmed by microscopic demonstration of the fungus. This disease occurs with great frequency during pregnancy. It is easily and satisfactorily treated with gentian violet, 2 per cent aqueous solution. A non-staining propionate jelly has given good results, is more acceptable to the patient and may be applied at home.

Trichomonas vaginitis appears to be a chronic disease of about 80 per cent of all adult females. In its more severe forms, the cervix, as well as Skene's and Bartholin's glands, and the urinary bladder are involved. When acute, only mild local treatment is tolerable. The preparations and regimens utilized are legion, indicating that there is no certain-cure treatment. Arsenical and silver salt preparations in powder and vaginal suppository form are most generally used, with or without acid douches. Beta-lactose and lactobacillus powders also have been successful. However, it is wise to be familiar with more than one method of treatment since none works in all cases. Recurrence of the infection frequently is due to deeplying cervical involvement, and success often follows cauterization of the ectropion and retention cysts which may be present. It is important to cauterize the angles of lacerations, since these may form pockets which act as constant sources for reinfection.

The most common lesion of the cervix, nonspecific bacterial cervicitis, is rarely seen in the nulliparous cervix except as a mild involvement of a congenital erosion. Most usually it appears as a complication of laceration and ectropion. Acute infections must be treated conservatively by means of proper hygiene and local applications, to avoid extension of the process to the upper genital tract. Similar treatment is very effective in mild infections. Available are douches of many types and various drugs contained in jellylike bases. Normally, the vaginal pH ranges between 4.0 and 4.5. With this degree of acidity the squamous epithelium proliferates to replace the columnar epi-

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thelium characteristic of ectropion. Consequently, acid douches, utilizing household vinegar, lactic acid or hexylresorcinol, should be prescribed. Vinegar is readily available, and 4 tablespoonfuls to 2 quarts of warm water is recommended. For the fussy impressionable patient, 1 teaspoonful of lactic acid USP to 2 quarts of warm water will produce the same results. Among the jellies which are effective are Triple-Sulfa, Aci-Jel, Westhiazole, and Allantomide. Their outstanding advantage is ease of use. Douching requires a certain privacy, unsightly equipment, and time. Jellies, on the other hand, are easily used, and many patients will carry on adequate treatment at home by this means when douches would be haphazardly taken, if taken at all. Local treatment by douches or jellies should be prescribed from one to three times daily, depending upon the severity of the infectious process; treatment at bedtime is most effective. Penicillin vaginal suppositories are available but have been disappointing in use. Tampon therapy, utilizing a wide variety of medicaments, usually hygroscopic in action, has been employed in the past but is of questionable effectiveness.

If the cervical involvement is unchanged with local and home treatment, cautery of the cervix is indicated. To avoid unsatisfactory results, certain contraindications should be kept in mind, a definite and meticulous technique followed, and after-care given until the lesion is cured (Table III). Cautery must never be utilized in the face of uncertain or equivocal diagnosis. When used in the presence of an acute cervical or pelvic inflammatory process, severe intrapelvic genital infection and peritonitis too frequently result. Uterine retroversions should be corrected before cautery. An unreplaceable retroversion often indicates the presence of chronic pelvic inflammatory disease. In many women retroversion produces a venous and lymphatic stasis which contributes importantly to intrapelvic spread of cervical infections. It is best to avoid cautery within a few days of the next expected menstrual flow because of the pelvic hyperemia which is present and because of the inability to evaluate properly bleeding which may follow. Cauterization of minimal non-neoplastic lesions should be avoided early in reproductive life. If these patients are followed carefully after a properly conducted delivery, the residual cervical lesions generally can be healed by patient local treatment. By such means cer-

TABLE III. CAUTERIZATION OF THE CERVIX

A. Contraindications:	
1.	Uncertain or equivocal diagnosis
2.	Acute cervical or pelvic inflammation, pyometra
3.	Unreplaced uterine retroversion
4.	Close to expected menses
5.	Minimal non-neoplastic lesion early in reproductive life
B. Technique:	
1.	Thorough bimanual and visual examination of internal and external genitalia
2.	Speculum to bring axis of cervical canal in continuity with vaginal axis
3.	Non-staining antiseptic to portio and external os
4.	Probe cervical canal for patency and stricture
5.	Radial cauterization—begin on posterior lip
	(a) Avoid endocervix
	(b) Depth depends upon pathology to be corrected
	(c) Destroy Nabothian cysts first
	(d) Better repeated cauterizations than one radically extensive
6.	Control bleeding
7.	Apply powder or jelly, insert tampon
C. Instruct Regarding Home Care:	
1.	Bleeding and discharge
2.	No intercourse
3.	Daily application of powder or jelly, with or without douches
D. Follow-up Care:	
1.	Office examination at least every two weeks until lesion is healed
2.	Bimanual examination with visual examination of cervix at each visit
3.	Probe or dilate canal at each examination
4.	Repeat biopsy
5.	Repeat cautery.

vical scarring is eliminated or reduced, so that subsequent lacerations at delivery are extremely minor in degree and stenosis of the endocervix is avoided.

A thorough bimanual examination, both vaginally and rectally, as well as careful visual examination of the genitalia, should be carried out even before preparations for cauterization are made. If no contraindications are present, the vaginal fornices and external os should be cleared of discharge. The cervical canal should be brought to lie in the same axis with the vagina to facilitate the use of the cautery electrode. This is most easily accomplished by using a tubular speculum which has the added advantage of protecting the sensitive vaginal mucosa from the heat of the cautery as well as from inadvertent burns. It is not necessary to use a tenaculum—actually it causes more difficulty by being in the way. A non-staining antiseptic applied to the portio and external os does not obscure the lesion to be treated.

Cautery destroys both healthy and infected tissue. Healing results from the replacing development of scar tissue. Cautery incision thus should be made in radial fashion, planned to utilize the resulting contracting scars in overcoming the eversion present. The depth of the cauterization will depend upon the extent of the lesion being treated, and may vary from 2 to 5 millimeters in depth. If no eversion is present, the cautery must be applied superficially only, or

stenosis of the canal may result. For the same reason the endocervix should be avoided. Control of the depth of the incision is best obtained by heating the electrode outside the canal to a cherry-red color and then applying it to the lesion. Nabothian cysts should be destroyed first and all mucus removed before radial incisions are made, since these areas will determine the location of the incisions. Because some bleeding usually results, it is best to begin the incisions on the posterior lip and at the lateral aspects to avoid obscuring the field. The incisions should never be closer than 0.5 centimeter, and generally five will treat adequately any cervical lesion. Best results are obtained by repeated light cauterization at monthly intervals rather than by radical and extensive cautery done at one visit because the repair process can be more accurately guided in correcting the lesion being treated. Bleeding which may be encountered can be controlled by light cauterization. After the cervix has been radially cauterized and bleeding controlled, a sulfonamide powder or one of the medicated vaginal jellies should be applied to the vaginal vault and cervix to absorb the resulting discharge. One should be certain to insert a dry vaginal tampon before completing the treatment to avoid the embarrassing discharge which occasionally occurs to the patient on her way home. The strings should emerge from the introitus so that it can be easily removed, which the patient is instructed to do on retiring that night.

It is important that the patient be given detailed instructions regarding treatment at home. She should be warned that within a day or two a copious discharge may develop, that there may be considerable bleeding after a week's time, and that occasionally some backache may become noticeable. If it is explained that these accompany the healing process, their appearance causes no apprehension. The bleeding which results from the separation of the superficial slough at from seven to ten days rarely is profuse. If there is no more than that accompanying a normal menstrual flow, there is no need for concern, but amounts in excess of this call for immediate examination. Intercourse is interdicted for at least three days, preferably until after the next office visit at two weeks. The use of a medicated vaginal jelly once or twice daily reduces the discharge and odor to tolerable proportions. Acid

douches help remove the debris and should be taken either in the morning or before the jelly is inserted.

For successful treatment by means of the actual cautery, continued follow-up care is essential. The patient should return to the office at least every two weeks until the lesion is healed. Again a complete pelvic examination should be done. The cervix must be visualized and the endocervical canal probed to insure its patency. If any tendency towards stenosis is found, dilatation should be done. At two weeks a sloughing cervix is found, with no extension of the original lesion. Occasionally excessive granulations may be present; these may be controlled by light cauterization. At three weeks the slough separates, and clean granulation tissue is seen, with beginning squamous epithelialization at the periphery. If the desired contraction is not being obtained or if some areas show residual infection, light radial cauterization may be performed. At five to six weeks the portio should be covered with glistening squamous epithelium, and the velvety red columnar epithelium should be seen only in the endocervix. If healing is incomplete at this time, either the diagnosis was in error and a second biopsy should be taken or the treatment was inadequate. Rarely are other complications encountered. Before the patient is discharged with the assurance that the cervical lesion has been eliminated, it is wise to do a thorough physical examination to discover other existing pathological processes. No female patient should ever be dismissed without the injunction to return every six months for an examination firmly placed in her mind.

In summary, lesions of the cervix uteri are of extremely common occurrence. These may be divided into four groups—developmental, traumatic, neoplastic, and infectious. Their proper management requires thorough examination to establish with absolute certainty the nature of the lesion. Biopsy should be done with the slightest suspicion or doubt. Simple persistent treatment will eliminate the majority of amenable lesions, while judicious use of the actual cautery will produce a cure in the remainder.

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Good Psychiatry is Good Medicine

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THERE ARE many brands of psychiatry, some of which have stemmed largely from a prevailing idea that the field of psychiatry must achieve what is called "the broader vision." As a result, some psychiatrists have entered into varied paths of human endeavor which are not strictly medical—they have participated in peace conferences, assisted in the United Nations, discussed the devastating effect upon the emotions of the housing problem, of race prejudice, and so on. These efforts, which are undoubtedly interesting and important, may be classed as sociology, or social psychiatry, or something other than psychiatry *per se*. I do not decry any of them. Without a doubt, psychiatry can make a contribution to several disciplines, as can many of the other branches of medicine. However, particularly at this time, I am uneasy about anything that takes psychiatry *per se* away from being a medical specialty or takes psychiatrists as a group away from being physicians.

By its very nature, psychiatry is easy prey for charlatans, a target for loose-thinking, intermingling in the public mind with cultism, faith cures and metaphysics. Furthermore, the situation has been aggravated by the terminology peculiar to the field. Even many medical men entertain the opinion that psychiatry is something rare, strange and peculiar, and that in order to accomplish anything psychiatric, it is necessary to speak in psychiatric terms. All of this I do decry. After forty years in the field, I do not know anything about psychiatry that cannot be expressed in the ordinary medical terminology or the English language as they obtain. Actually, in applying psychiatric principles, other medical men have a wider opportunity than the psychiatrists will ever

have. In the broad contacts of the other specialties, there is a golden opportunity for *preventive* psychiatry.

Psychiatry is not mystical or frightening. It is merely the medical specialty devoted to emotional disorders, and after all, the emotional component in disease is neither new nor strange. We all know that the old-time general practitioners, and even the old-time surgeons, manipulated the emotions of their patients to the degree of compensating in a large measure for lesser medical knowledge and rudimentary equipment. Now doctors know more about disease. They have marvelous medical equipment. With the advent of modern medicine and scientific research, doctors learned a great deal about bacteria and pathological specimens—but they forgot the individual. And while we treat disease, we certainly cannot treat it with maximum success without treating the individual. Many times a week, in my own practice, I condemn the modern science of medicine where it has forgotten the individual and forsaken *the art of medical practice*.

Certainly we must not minimize the significance of Pasteur's discoveries and the other marvels evolving from somatic research, but we must also take full cognizance of the importance of the emotions, which were understood in a simple way by the old-time practitioner and are now contained in psychiatric principles.

I have been most disturbed at the extent to which some nonpsychiatric physicians have neglected these principles in their practice. During the recent period of emphasis on cancer, certain practitioners advocated complete frankness as the proper procedure in dealing with patients. Some of the results of this ultimatum, issued with no apparent concern for its psychological effects, are devastating. I know of one instance where a woman with cancer was visited by her gynecologist while her husband was out of the city. That gynecologist, subscribing to the straight-from-the-shoulder school, told her quite bluntly that she had cancer of the uterus and that there was general metastasis. Sparing her nothing, he further intoned that she would probably live no more than from three to six months longer. Then, being a very busy man, he marched off, leaving the patient to gather her wits, wandering about her home, bewildered and distraught. There her husband returned—in time to prevent her suicide!

Presented at the eighty-third annual session, Michigan State Medical Society, Detroit, Michigan, September 24, 1948.

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Such procedure may be scientifically accurate, but is it good medicine? It is not good psychiatry.

Without singling out gynecology, but only using it as an example, I call attention to the gynecologist who, after a brusque, impersonal examination, tells the patient, with no preparation or even reassurance, that (1) she has diseased tubes, (2) her ovaries and uterus must come out, but (3) she has enough children so she doesn't need them anyway! I have known any number of women patients whose personalities had been sharply and disturbingly changed, not by the removal of the ovaries and the uterus, but by the removal of a part of their ego that is indispensable to the emotional integrity. Furthermore, I have seen their somatic complaints disappear with no treatment other than repairing the emotional damage that had been done.

Even the psychology of a new denture is a delicate matter, commanding consideration and understanding and tact in dealing with the patient. I have known some dentists with great mechanical skill and scientific knowledge to have little or no success in supplying dentures. I have known other less brilliant dentists to have nothing but success. Time and again, it has been a question of their skill, or lack of skill, in helping the patient to accept the idea of total extraction and then to become accustomed to wearing the denture.

Along with modern medicine, modern industry forgot the importance of the emotions. When I became the first full-time psychiatrist in industry, at Cheney Brothers in 1915, industry had done a great deal in matching the employee to the job along physical and intellectual lines, and according to educational background and skills, but little attention was being paid to the emotions. Industrial management had forgotten the lesson of yesteryear. It had overlooked the wisdom of the old-time grocer who spoke not of "that strong, brilliant delivery man" but of "that willing boy." In his homely way, that grocer realized that in job adjustment the underlying determining factor is emotional—that the good delivery boy must be willing, or all of his other qualifications will be nullified. The productive worker must have the "will-to-do," or in modern scientific terms, he must have a "high interest level."

In studies conducted at Cheney Brothers, we established the fact that where interest level on the part of the workers was high, absenteeism and

sickness were at a minimum, and where interest level was low, the incidence of absenteeism and sickness was high.

Experiences during the last war established the relationship between interest level and pain, proving that where interest level is high, there is great tolerance to pain and discomfort. So it was that soldiers had their hands shot off on the battlefield, but felt no pain at all because their interest in survival was so intense. Later, however, when they were processed out of the army, had no job and no definite plans for the future, their interest level dropped, which was the explanation for a great many of the so-called "war neuroses."

I would like nothing better than to spend an evening with a group of physicians discussing what I consider a faulty premise in labelling as war neuroses those conditions that were, in reality, perfectly normal responses to the situations experienced by servicemen. If there is anything in the power of suggestion, we in medicine, and particularly in psychiatry, carry a great responsibility when and if we label a condition as a psychiatric disease.

But I have digressed. As another example of good psychiatry in good medicine, I might cite hypertension. I believe firmly that if there is the slightest tendency toward hypertension, it may be aggravated by a reduction in interest level, with a concentration upon unpleasant possibilities. Consider the patient with coronary disease who is told by his doctor that he must go straight to bed, do little or nothing at all for a time, and then take things gradually, very gradually, and he may—not will, but may—live five years. Rest in bed and momentary relief from responsibility may be indispensable, but the way it is accomplished may spell the difference between success or making a bad matter worse.

Such a warning or threat, whichever we might call it, was once given to a colleague and friend of mine. Even with his knowledge of medicine, he was left alarmed and tense, with an almost morbid fear of over-exerting. All of his movements became over-cautious. He had an anxious expression. And above all, his hypertension was increasing to the danger point. Finally, I said to him, "Relax, old man. You might as well be dead as practice at it!" Well, he lived for fourteen years after his attack, during which time he took things

much more easily than before; but I am sure that he lived longer because he realized, before it was too late, that all he was being asked to do was "to be his age," and to lead a reasonable and useful life.

I have tried to point out the fact that the emotions exert a profound effect upon the human being in sickness and in health, and further, that a high interest level is a powerful ally in all medical procedures.

Here I would like to mention the intrinsic value of merely giving patients the opportunity "to get things off their chest." Among my many experiences of this sort was one woman patient inclined toward hypertension who would occasionally come to us for a check-up and a chance to talk things over. During her brief visits, there was a fluctuation of 60 milligrams in her blood pressure, without the use of drugs or anything except helping and teaching her to meet her problems, which in her case were largely centered around her husband.

Of course, some practitioners wave aside those who advocate letting the patients "talk things over." They remind us that they must see at least twenty people between two and four in the afternoon, and, in plain English, they don't have time to listen to all their troubles! On the other hand, there are those doctors who want to know what they can tell their patients in the limited time they have.

As far as time is concerned, it is not always the all-important factor, because one hour with a patient may be completely ineffective, whereas two or three of the right sentences may be just what the patient needs—the right words are often as powerful as some of the pills we prescribe.

Beyond question, there are many cases that demand much time, and if the doctor does not have it, we psychiatrists urge not giving the patient the brushoff but sending him to someone who does have the time, as well as the ability, to help him. Otherwise, one of two things will happen. Either the patient will become a neurotic, making the rounds of all the doctors, or he will land in the laps of the charlatans. And if any physician is not familiar with the thriving business of charlatanry in this country, he should read "Where Do People Take Their Troubles?" by Lee Steiner.

Rather than devoting twenty minutes to writing a prescription, a doctor occasionally might bet-

ter reduce it to ten minutes, and spend the rest of the time helping to plan his patient's life. Not only the physical being, but the vocational life, the avocational sphere, and the social and recreational relationships may harbor a retarding factor in medical disability.

We sometimes marvel at the phenomenon of a young doctor, new in the community, who cures some patient whom none of the older, established doctors had been able to help. If those incidents were analyzed, we would usually find that the young doctor simply took the time to connect up some psychosomatic complaint that the other doctors had been too busy to unravel.

I do not particularly like the term psychosomatic medicine, about which we have been hearing so much these past few years. I would like to hear more about somatopsychic medicine. But whether psychosomatic or somatopsychic, it is nothing new. Even the ancients were familiar with psychosomatic principles, as is shown by a study of language, where from the ancient to the modern, we find expressions, particularly vulgar ones, indicating an innate appreciation for the body-mind relationships. "He has no intestinal fortitude" is so old it was probably written in hieroglyphics, and it only means that if a doctor had to pass difficult state board examinations tomorrow or lose his license forever, it might precipitate in him an emotional strain that would cause an upset stomach or even a loose intestinal tract. There are many other like sayings. For instance: "My heart's in my mouth." "It made her stomach turn over." "His hair stood on end."

In my experience, I have seen gastric upsets, backaches, headaches, and so on, that never would have occurred if it had not been for some underlying emotional disturbance. But so have each of you.

Hyperthyroidism, as another example, has been commonly accepted as calling for operative procedure, but we have now learned, beyond any shadow of a doubt, that limiting treatment to an operation alone is the major reason for unsatisfactory results, when such disappointments occur. It is evident that anyone sick enough to need an operation needs his emotional balance inquired into to assure good surgical results. Furthermore, in some cases, after helping the patient regain a good emotional balance, physicians have often found an operation to be unnecessary. This is no

pearl of wisdom discovered by me. It is a statement of fact which now comes from the "mouths" of the best surgical "hands" in thyroidectomy!

As always, there is the danger of going to the other extreme, of becoming so overwhelmed by the psychosomatic viewpoint that the physical aspect of disease is neglected, perhaps to the serious detriment of the patient. I know one young psychiatrist who became so entranced with the psychosomatic factors in diabetes that, in one case, he failed to prescribe the physical aid of insulin, and he lost his patient. She went into coma, out of which he brought her, but in spite of anything he could do then, she died. It goes without saying that physicians must maintain their equilibrium, neither treating the physical to the exclusion of the mental, nor the mental to the exclusion of the physical, because there is no such thing as a physical disease without a psychological recording, nor a mental disease without a physical recording.

There was a time when, to the best of medical knowledge, every disease was considered either as "physical" or "mental," but research has demolished that theory and torn down that barrier.

For illustrative purposes, I would describe disease as being graphed in a rectangle on which a line is drawn from the lower left hand corner to the upper right hand corner. We will imagine that psychological symptoms are all contained in the area above the line, while the somatic symptoms are in the space below the line.

In this rectangle of disease, we can delineate one segment through the middle that shows 50 per cent of its symptoms below the line, on the somatic side, and 50 per cent above the line, on the psychological side. In that particular segment, we might, for example, place general paresis, with its symptoms more or less 50 per cent somatic and 50 psychological. We can agree that this is a disease, but we certainly cannot label it either wholly physical or wholly mental.

Over to the right in the rectangle, we can draw a segment showing perhaps 90 per cent of the symptoms below the line, on the somatic side, and only 10 per cent above the line, on the psychological side. In this segment we might place the carbuncle. If anyone does not believe that a carbuncle should have any percentage above the line, on the psychological side, let him get one—and it will then be quite clear to him that, in ad-

dition to the physical symptoms, the discomfort and inconvenience of the carbuncle exert a definite effect on the personality!

Since medical men are well agreed that every disease has psychological components, every disease must be partly above the line, on the psychological side, at least to some degree. To my way of thinking, every disease must also be partly below the line, on the somatic side.

True, there is still a large group of psychiatric diseases in which we have not yet identified any somatic accompaniments. But just because the somatic accompaniments have not been identified does not mean that they are not there. I am fully convinced that with our ever-improving methods of physical diagnosis, time and effort will establish the scientific fact that there is no psychiatric disease without a somatic accompaniment.

Conclusive evidence to this effect is gradually, but continually, piling up. Remember, with our formerly limited knowledge, general paresis was thought by some to be wholly psychological. Now we know it is syphilis of the cortex of the brain. Involutional melancholia was also thought to be wholly psychological. I am convinced that it is pretty well tied up with an endocrine imbalance.

Also, at the Nobel Institute in Stockholm, under the direction of Dr. T. Caspersson, important chemical differences are now being observed between the nerve cells in the frontal lobes of well persons and those of patients suffering from various so-called "mental" diseases, including the old "functional" standbys, schizophrenia and manic-depressive psychosis. I predict that, in the not too distant future, medical men will talk about, and study, and treat, not this "physical" disease and that "mental" disease, but just disease, from the physical and the emotional points of view.

Until recent years, the so-called mental diseases, the greatest of all public health problems, were simply accepted, like death and taxes, where people pay and die. Psychiatry, the medical specialty devoted to mental disease, is still suffering growing pains, still struggling to separate fact from fancy and to establish itself as an enduring, effective medical specialty. Therefore, in psychiatry more than in any other specialty, there is a demand for a housecleaning and a hardheaded differentiation between hypotheses and scientific fact.

On this basis, I decry certain present-day trends,

not the least of which is the close identification between psychiatry and sex. Rather than interpreting sex as including everything from spending a connubial night to leaning on a hitching post, psychiatrists might better adhere to the conventional dictionary definition. I disagree most heartily with those who would interpret sex as the whole of life and expand the definition accordingly.

A part, but only a part, of man is his creative urge, and in turn, only a part of his creative urge is his procreative urge. Expanding the definition of sex to a meaning distinctly different from that cannot possibly aid the exchange of knowledge between scientific disciplines, nor can it contribute to patient enlightenment.

In this connection, I also take exception to any dogmatic statement to the effect that sex, in accordance with its conventional definition, is always the strongest of all human emotions. Without being vulgar, we can each recall to mind instances wherein self-preservation of the individual's social standing transcended sex as it is conventionally understood. But discussion along this line is a separate subject in itself.

Another trend in psychiatry that needs practical clarification has to do with child psychiatry and its many and varied schools of thought, which run all the way from those subscribing to the theory that the child should be unfettered and completely free to "express himself" in any way he sees fit, to the school that advocates disciplinary measures and strict training in martinet fashion, such as the "do this, do that" technique. Here again, going to either extreme is obviously psychiatric nonsense. I also view with apprehension any technique that routinely interposes a psychiatrist or anyone else between the child and the parent, which offers the grave danger of increasing the child's conflict, or the parent's, or both.

I also take issue with the "love starvation" school, which propounds the theory that most, if not all, emotional troubles stem from the fact that the child's craving for love was never satisfied. Proponents of this school would have us running along dripping love all over the place until the child slips and fractures his future! Such irrationalizing must root in parents, and perhaps doctors, who take refuge in the love starvation theory because they are too lazy or too selfish to do sturdy thinking. It is always easier and a

bit more thrilling to be loved and liked, rather than disliked, even when the dislike is accompanied by respect.

Happily, the majority of psychiatrists deplore such psychiatric flights of fancy. In the demanding task of getting sick people well, they prefer keeping their feet on solid ground, with a grip on the core of valid scientific fact, rather than flaunting their wings in the rarified atmosphere of "psychiatric aviation."

Indeed, I am neither a pedantic philosopher nor a mystical sage who knows the secret of the inner workings of man's wonderful mind. I profess to hold no magic key to the door of mental and emotional mechanisms, about which, in fact, we in psychiatry still know very little that can be classed as unalterable scientific fact. But I do profess that we are on the way to fashioning the keys to the diagnosis and treatment of the psychological components of disease.

I have tried to show the basic medical groundwork that is being laid in the field of psychiatry by physicians who are dealing in scientific fact and hardheaded, realistic psychiatric philosophy. To solve the problem of mental diseases, we must (1) establish emotional disorders as diseases, and as such, a problem of medicine, and (2) establish psychiatry as an enduring medical specialty, working hand in hand with all other branches of medicine.

Increasingly, every medical man must be somewhat of a psychiatrist, as the surgeon must be somewhat of an internist, the dermatologist somewhat of a neurologist, and so on. The good old family physician of yesteryear helped his patient by allaying fears and anxieties, and encouraging him to face reality with courage and confidence, instead of escaping by attributing his weaknesses to factors over which he had, or has, no control.

Today such aid on the part of the medical profession is doubly needed, because so much stress has been placed on the emotions that many patients are interpreting their feelings as sickness, even when their reactions are perfectly normal under the existing circumstances.

I have spoken of the kind of psychiatry that will be seen and the kind that will be practiced. Now I will indulge in a confession of faith on what I believe the psychiatric specialist should know.

First, I believe that psychiatrists must use all of sound somatic medicine, all the scientific knowl-

edge of diagnosis and treatment that has been developed by all branches of medicine. As mental disease is not a thing apart from other diseases, neither can psychiatry function effectively without working closely with the other medical specialties and utilizing their experience and knowledge.

Secondly, psychiatrists must use all of the somatic adjuvants which have been developed primarily as an aid to our specialty, such as the shock therapies and now psychosurgery and certain of the chemotherapies. In the field of psychosurgery, in a few short years, we have moved far beyond the period of "ashcan selectivity," when we operated only on those patients who had nothing left to lose. The development of topecomy, the undercutting technique and the thalamotomy is being rapidly followed by a knowledge of which patients should be operated on and which left alone, which operative technique is indicated for which patient, and what results may be expected.

I might interpolate that the current happenings in psychosurgery leave me both comforted and alarmed. It would be a stupid person, indeed, who is not impressed with the near miracles occurring in our field through the avenues of psychosurgery, but these very miracles call for caution to avoid excess.

To return to my confession of faith on what a psychiatrist should know and use, I will say that, thirdly, we must use methods of rehabilitation and re-education. In other words, we must go about training our patients to live in society as it is now constituted, which means that the psychiatrist must forsake boondoggling for practical vocational training, avocational training, social and recreational training, and physical educational training on the basis that society will demand of the individual patient in the future.

Fourthly, psychiatrists must have a broad knowledge of psychotherapy and its several forms. I believe that psychotherapy, regardless of its form, is essentially personal tutoring. Part of the public, and some medical men, are under the misconception that psychotherapy and psychoanalysis are synonymous. Nothing could be farther from the truth, and I feel sure that the psychoanalysts would be the first to correct this erroneous idea. Even as psychotherapy is only one of the tools in the psychiatric armamentarium, so psychoanalysis is only one of the forms of psychotherapy.

There are many schools of thought in psychotherapy, but the important overall essential is for the therapist to learn how to use himself. Under all circumstances, the psychotherapist himself is his own best tool.

I hope that some recent publicity accidents, in which some psychiatrists have been cast in the role of warning the public against other psychiatrists with whom they differ, will not result in diminishing confidence in the psychiatric profession as a whole. It is undignified and most unfortunate for the different schools to attack one another in an effort to preempt the field. So much of psychiatry is still on a hypothetical basis that all schools of thought are needed in the interests of scientific advancement. Out of honest differences of opinion comes progress, and we bespeak tolerance for all psychotherapeutic schools while we advance in this most important department of our growth.

From what I have said, it is evident that I see two trends in psychiatry: one is away from medicine, and the other, which I hope is the enduring one, is more and more toward being an integral part of the medical profession.

Psychiatry is a new specialty. It can be an important specialty and a popular one, but to my mind, the essential thing is not whether psychiatry is new and important and popular, but whether or not we psychiatrists can walk side by side with gentlemen of science as the years go by, being increasingly entitled to call ourselves a branch of scientific medicine.

We are not universal specialists—heaven forbid! We are doctors of medicine who realize that the body is the vehicle of the mind, and we are seeking a better knowledge of the human body because it is the vehicle of the mind. But this we cannot do alone. Every man of medicine must join us in his daily striving to treat the person as well as the disease, in the full knowledge that man's emotions are the driving force that makes man man.

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FROM THE PRESIDENT OF THE MINNESOTA STATE MEDICAL ASSOCIATION

The following is from the President's letter in *Minnesota Medicine* for June: "Do not ask what the American Medical Association or the Minnesota State Medical Association or your county society is doing about socialized medicine. Ask yourself what you are doing about it."

Methyl Testosterone for Migraine of Women

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R. C. MOEHLIG

IN ADVOCATING the use of another remedy for migraine, one runs into the danger of adding just another drug to the long list of those placed into the discard. However, the use of methyl testosterone in thirty-five women was attended with such beneficial results and a feeling of well

being in the majority that this report is, in our opinion, justified.

In evaluating the benefits achieved in this disease by any drug, one is dependent upon the statements of the patient, but migraine patients do not, as a rule, say they are improved unless the headaches, which are so frequently debilitating, are actually better or have not returned.

This report is limited to adult females. We have, however, treated adolescent males with methyl testosterone with alleviation of symptoms.

Dosage

Methyl testosterone was given in daily doses of 20 mg. This dose was continued in all patients for at least four weeks, but on an average of six weeks, at which time the daily dose was reduced to 10 mg.

Our experience showed that if the patient did not obtain relief within six weeks, there was no need to continue the treatment and no improvement could be expected. One of our thirty-nine-year-old patients continued to take 20 mg. daily for a period of two and one-half years. She had been told to discontinue the drug after three months, but because she obtained relief from her migraine, she refused to discontinue it. Her husband, being a pharmacist, continued to supply her with the product.

An interesting observation in this woman was the fact that her hair became darker and curly,

Read at the third annual Michigan Postgraduate Clinical Conference, Detroit, March 23, 1949.

AUGUST, 1949

so much so that she was asked by her friends whether she had frequent permanent waves. Another interesting observation was the enlargement of her muscles, particularly the biceps and calf muscles. No hirsutism nor voice change was noted. Her mental outlook was completely changed from one of irritability, depression and lack of ambition to one of calmness, cheerfulness and an increased ambition. This patient received the treatment over the longest period of time, and she never once experienced a return of the migraine.

Undesirable Effects

It is important to stress the undesirable effects and reasons for caution in treating women with synthetic male hormone. Among the undesirable effects are:

Hirsutism.—The development of hair on the cheeks, chin, breast, arms, legs, and abdomen may be avoided if the patient is given 20 mg. daily and told to return in four weeks. Should there be any development of hirsutism, the dosage should be reduced to 10 mg. daily or discontinued for two to three weeks. Our experience has shown that seldom did any hair develop before the fourth week, and when it did occur it was found more frequently in brunettes. Caution must therefore be used in women who are already hirsute, since the drug accentuates the hirsutism. Women would rather have migraine than hirsutism.

Voice Change.—A change in voice to a deeper tone was experienced in only three women. This complication was usually encountered only after three to four months of therapy. Discontinuance produced a return of the voice to the normal pitch.

Acne.—Another effect which women do not like is the production of acne, very much like that seen in adolescent boys. The smaller dose, 10 mg. daily, usually resulted in a clearing up of this condition. Again, the vanity of women does not permit them to have acne, migraine being preferred.

Muscular Aches.—A minor complaint made by three patients was that of muscular aches in the arms, legs and chest. The discontinuance of the drug for a short period of two weeks resulted in clearing up of this symptom.

Change in Menstrual Cycle.—A change in the menstrual cycle was encountered only five times

in the thirty-five patients. This consisted of flowing twice a month, followed by a period of amenorrhea, which returned to normal within two months after the drug was discontinued. We found that the daily 10 mg. dose did not interfere with the normal menstrual cycle. Women as a rule do not object to this complication.

Gain In Weight.—A gain in weight is a frequent result of methyl testosterone therapy. This is, in some women who are already obese, an objectionable feature, but most of them are ready to pay this price for the relief of the headaches. Of course the asthenic built woman finds this a desirable feature. The increase in appetite is, as a rule, characteristic of the therapy.

Nervousness and Irritability.—Some patients who were on the 20 mg. dose for over six weeks complained of nervousness and irritability. Usually we discontinued the therapy for two weeks and resumed it with the 10 mg. dose, which did not cause this effect.

Increase of Libido.—Several patients volunteered the information that they had increased sexual desire, and among these were some who for the first time experienced orgasm. Needless to say, there were no objections to this symptom.

Goiter.—Patients with goiter should be watched carefully, for methyl testosterone increases metabolism, and thus a goiter may be activated or if already active the goiter symptoms will be accentuated. Testosterone should not be given to patients receiving iodine solution or thyroid substance.

Diabetes mellitus.—Patients with diabetes mellitus have an increase of their blood sugar if given methyl testosterone, so diabetics should not receive this drug. This also holds true of testosterone propionate given parenterally.

In noting the undesirable effects, the physician may feel that they outweigh the benefits. We can assure him, however, that with supervision of the dosage, and a reduction of the 20 mg. daily dose to 10 mg.—or discontinuance for a time—these side effects are not serious. Quite true, they affect women in those places which touch their beauty, but again we say that these effects are easily prevented and controlled by supervision of dosage.

Comment

The beneficial results of methyl testosterone in these cases of migraine in women were gratifying. Not only did the patients express themselves as being grateful for the relief of headaches, but at the same time the feeling of well being, increased ambition, increased muscular strength and improved memory were additional beneficial features of the treatment. The patients stated that they concentrated better and had a feeling of well being. The criticism may be made that the results were psychic in origin, but the individuals were not told what was being used. Usually trade names were given in prescriptions. The cost is no greater than when the technical name, methyl testosterone, is used. It is well to inform the patient that the tablets are expensive; most pharmacists charge \$12.50 per hundred. Psychotherapy could not, we are certain, claim such uniform results as were obtained by methyl testosterone.

We are anxious to see how the results of others compare with ours. Of the thirty-five patients, four did not respond: in fact, one patient was made distinctly worse by methyl testosterone. This gives a percentage of 88.5 responding favorably. One of the four patients obtained relief of her headaches within two weeks, but she had such severe hot flashes and a feeling of heat all over her body that she had to discontinue the testosterone. She had had a complete hysterectomy for a uterine fibroid several months previously and, in addition, had a thyroid adenoma, a combination that one of us found in 63 per cent of 410 patients. The third failure was a woman of thirty-nine who obtained relief within a few weeks of therapy, but for some unknown reason, her physician increased the daily dose to 30 mg., which resulted in extreme nervousness and a return of headaches. The fourth patient obtained only slight alleviation of symptoms, but did have a feeling of well being. She did not obtain sufficient relief of her migraine and is considered a failure. It is of interest that her daughter who had had headaches for as long as she could remember had no recurrence in six months and enthusiastically referred her mother for treatment. Her son likewise has headaches, but he is just beginning treatment.

We appreciate the fact that thirty-five patients represent a small series, but the treatment produced such beneficial results in the majority and in such a short time that we feel that this form

of therapy has great promise. Certainly a larger series over a period of several years is necessary to evaluate the treatment.

Diagnosis

A review of the literature shows that there is some divergence of opinion as to which and how many of the classical symptoms must be present to validate the diagnosis of migraine. By definition, migraine is a symptom complex occurring periodically and characterized by pain in the head, usually unilateral, and by vertigo, nausea and vomiting, photophobia and scintillating scotomata. Other symptoms associated with migraine are: vasomotor phenomena, such as paleness with vasoconstriction of the surface vessels, followed by perspiration and flushing of the face; polyuria; mental confusion and drowsiness; paresis of a temporary nature, involving one or two extremities, and tinnitus fairly frequently. A gastrointestinal type, in which there is a preponderance of gastrointestinal symptoms and a minimal cephalic phase, also occurs. Individuals with migraine are usually above average in intelligence, and there is a high incidence among professional people. It is well known, of course, that the incidence of familial history of migraine is universally high.

Of our thirty-five cases, twenty-eight were considered as typical of migraine, with a majority of cardinal symptoms being present. The seven patients not considered as having typical migraine had, however, persistent long-standing periodic headaches associated with a variety of the aforementioned symptoms, but they would not be classed as true migraine. The important point to be stressed, however, is that they all received relief from their headache by methyl testosterone. Some stated that within one week the headaches were alleviated and then gradually disappeared, but on the average two weeks of therapy were required before improvement was noted, that is, a decrease in the severity and number of attacks.

Discussion

How long must treatment be continued? We have had one patient who has taken methyl testosterone for two and one half years in 10 mg. daily dose without any untoward effects. Another has had no return of headaches in two years, after being treated for three months. We have advised the discontinuance of the drug if relief was obtained after two months of therapy, and while it

is as yet too early to say whether there will be recurrences, we have at least ten patients who have had no recurrence. A few had mild recurrences—and we stress the word mild—but they were relieved by a resumption of therapy.

Naturally, it is important to determine how long these benefits will last, but so far with those patients who have received the drug over the longest period of time, the results have been most satisfactory.

As to how methyl testosterone produces its beneficial effects in migraine, we are not prepared to say. One can propose many speculative opinions, such as a change in the pituitary-hypothalamic functions.

It is of interest that when the effects of testosterone are compared with anterior pituitary extract injections in dogs, the results are in many ways similar. These are:

1. An increase in metabolism.
2. A lessening of sugar tolerance.
3. Long continued injections and administration of these substances activate a goiter.
4. Increase of hemopoiesis.
5. Increase in muscle mass and muscular strength.
6. Increase in bone activity with increase of alkaline phosphatase.
7. Amenorrhea in the female.
8. Retention of nitrogen, sodium, phosphorus and calcium.

Furthermore, from a familial constitutional standpoint it can be stated that the majority (seventy-five of 100 migraine patients) stem from families that are tall. In explanation of this, it was found that seventy-five of 100 patients had one or more members in the immediate family who were 72 inches or more in height. This does not mean that the migraine patients themselves are taller than normal, but in 75 per cent of the cases this is true of some members of the immediate family. This may mean that the constitutional background of tallness is of pituitary origin.

A change in the electrolytes of the blood may be a factor in the benefits achieved.

Regardless of how the results are accomplished, the patients herein reported feel so relieved and show such a marked improvement in personality factors that they are profuse in their praises of methyl testosterone therapy. The relief from distressing and debilitating headaches, the feeling of euphoria, a new outlook on life, increase of mus-

cular strength and improvement in memory are certainly gratifying to observe in contrast to our all too many patients who say, "I am no better, doctor."

Somewhat aside from its use in migraine, we would like to state that methyl testosterone has been extremely useful in cases of melancholia in general mental depressions which occur near and at the menopause.

We have also used it, with distinct benefit, in 10 mg. daily doses in boys who suffer from migraine. Here too emphasis is to be placed upon proper supervision of dosage and frequent contact with the patient through the parents. Needless to say, caution must be exercised in these young patients because of undesirable premature sexual development. We have not found it necessary to continue the dosage for over six weeks, and we have always interrupted treatment at this time.

Summary

In thirty-five women suffering from migraine, the use of methyl testosterone was followed by relief in thirty-one patients, a percentage of 88.5. Of this number, twenty-eight were considered as suffering from typical migraine, usually with a familial history of migraine and the typical symptoms of the disease.

The initial dose was usually 20 mg. daily and was reduced to 10 mg. after four to six weeks. Experience showed that if relief was not obtained in six weeks, there was no need to continue beyond this point.

The improvement noted was not alone in relief of headaches but in a feeling of well being, increased ambition, increased muscular strength, improved memory, increased libido and a healthy mental outlook.

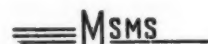
It has been emphasized that there are certain undesirable effects which call for caution and strict supervision of the treatment. Some of the undesirable effects which are particularly distressing in women are the masculinizing effects such as hirsutism, voice changes and acne. Women would rather have migraine than mar their beauty by using testosterone. Beside these undesirable cosmetic and masculinizing changes, the drug should be given with caution in patients with goiter or diabetes mellitus.

Despite the undesirable effects, which can be

guarded against by proper supervision, the benefits far outweigh the risk involved.

One patient has experienced no recurrence in two and a half years; another one has had no recurrence in two years.

We feel that methyl testosterone deserves a place in the treatment of women with migraine, but a larger series over a longer period of time will be necessary to evaluate the treatment. For the present we are enthusiastic about the short-term results.



ARTERIOVENOUS SHUNTS

(Continued from Page 1012)

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OLD AGE

Beauty is in the eye of the beholder, and age is in the mind of the aged. God has blessed us in that we never know when we are old. To the college boy, thirty-five is the age at which a man should retire from the dance floor and make room for a young man who can really dance. Fifty is aged to the junior partner who feels that old men of fifty should step aside and let young men of forty take over the business. Men of fifty feel that old chaps of sixty and seventy should go into the chimney corner and talk of the good old days, and get out of the way of young men of fifty.

No man ever feels that he has arrived at old age. Old age is like the pot of gold at the end of the rainbow. It recedes as we advance. It is always a little bit further along on life's pathway.—Editorial by Roe Fulkerson, *Kiwanis Magazine*, July, 1949.

Rationale Therapy of Allergic Disease

By William Appel, M.D.
Kalamazoo, Michigan

IN THIS PAPER the rationale of the following methods of therapy of allergic disease will be discussed very briefly: avoidance of offending allergens, desensitization, and symptomatic therapy. Since the rationale of therapy, however, depends on the pharmacologic basis for that therapy—or in the absence of a known pharmacologic basis, on the theoretical basis for therapy—I will very briefly review the pharmacologic and theoretical bases of therapy of allergic disease.

Though some of the manifestations of allergy* cannot be explained by histamine alone, the histamine theory is at present the most valid working concept we have to explain allergic phenomena, and it has been definitely proven that histamine occupies a most important role in such phenomena.

The histamine concept may be expressed in the following way:

- A. Antigen plus antibody on cell surfaces→histamine.
- B. Histamine (in free form) at shock tissue→allergic reaction.†

Apparently what happens is that as a result of the union of antigen and antibody on the cell surfaces, cell damage and the dissolution of cell proteins, with the liberation of histamine, occur.

It has long been known that histamine is normally present in many body tissues, bound internally in the structure of the tissue, and in the bound form it does not cause allergic disease. It is the shift from the intracellular form of histamine to the extracellular or free form that is important in the production of the allergic reaction. Only when histamine can act on the shock tissue may the allergic reaction occur. It should be emphasized here that allergic disease is not just a local disease affecting the nose, bronchi or skin but a metabolic disease affecting the entire organism—growth, et cetera—and therapy is effective only

*Hypocoagulability of blood, and the temporary hypercoagulability which precedes it; leukopenia; changed sedimentation characteristics of red blood cells. Such conditions also as eczema and contact dermatitis, as well as the irreversible findings of periarteritis nodosa, are not so well explained as, e.g., urticaria and angioneuratic edema.

†Increased capillary permeability, stimulation of secretions, smooth muscle spasm.

in so far as it aids the whole organism and not just the part.

Avoiding the Offending Antigen

It is evident that the above reaction A cannot proceed in the absence of one of the factors, namely, the antigen itself; and so any measures which truly cause avoidance of the offending antigen will benefit the patient. Thus with an individual sensitive to house dust, freeing his room of dust benefits him. If he is sensitive to a particular pollen and he moves to an area free of that pollen, he is benefited. Any measures which produce an effective barrier between the patient and the antigen to which he is sensitive benefit him. Masks or nasal filters are very often not effective because they fail for one reason or another to maintain this barrier.

Desensitization Therapy

In past years the theory was expressed, and has gained relatively widespread acceptance, that in the course of so-called desensitization therapy to a specific antigen, specific immune antibodies (so-called blocking antibodies) are produced to a degree sufficient to prevent or retard the allergic reaction. It has also been stated that in those individuals who, so to speak, "outgrow their allergy" the same process occurs—the production of blocking antibodies—but at a much slower rate than when specific desensitization therapy is used. There is good evidence that in the course of desensitization therapy antibodies are produced. There is as yet, however, no proof that there is a direct degree of correlation between the amount of blocking antibody and clinical immunity. While it is a known fact that desensitization therapy is of decided benefit to many persons, the exact mechanism to explain the beneficial results obtained has not been demonstrated adequately and is still not clear. This is not in any way intended to discourage the use of desensitization therapy where it is indicated, for that form of therapy remains the so-called specific therapy and affords the best results—aside from prophylaxis, i.e., avoidance of the offending antigen.

Symptomatic Therapy

The efficacy of symptomatic therapy depends, of course, on a knowledge of the pathologic condition present and the pharmacologic properties of

the medication used to treat that pathologic condition. Thus, in bronchial asthma at least three pathologic changes may occur: (1) edema of bronchial mucosa, (2) constriction of bronchi and bronchospasm, and (3) production of tenacious, highly viscous mucus which plugs bronchioles.

Epinephrine.—By decreasing the swelling of the bronchial mucosa and by antagonizing the bronchoconstrictive effect of the overstimulated vagus nerve, epinephrine affords considerable relief. However, it does not afford much, if any, relief when the bronchioles are plugged with mucus. Because of the fact that epinephrine is a most excellent vasoconstrictor and because it stimulates the sympathetic nerve endings (and so has an effect antagonistic to that of vagal stimulation), epinephrine is of vast value in the palliative treatment of allergic disease.

Ephedrine.—The effect of ephedrine is similar to that of epinephrine, but it is valuable because its effect lasts longer and it may be given orally or applied locally (e.g., in nose drops in allergic rhinitis) whereas epinephrine is usually given by injection or inhalation. Various ephedrine-like drugs** have been developed to eliminate some of the side effects of ephedrine but the pharmacologic basis for their use is the same as that of ephedrine or epinephrine.

Isuprel.—A sympathin-I†† mimetic drug, isuprel has relatively recently come into use. It has the inhibitory qualities of epinephrine without most of the excitatory qualities of that substance, though apparently it is not completely without these properties, for isuprel can produce tachycardia and palpitation.

Aminophylline.—This is of value in the treatment of bronchial asthma because it has a direct bronchodilating relaxing effect on bronchial muscle which has been constricted. Given intravenously, it is of great value in the severe prolonged attack in which bronchial constriction and spasm is present. It is dangerous, however, to give this drug rapidly intravenously. The lack of effect of aminophylline in the early acute attack of asthma is probably due to the fact that, in the early at-

tack, the underlying pathologic condition is edema of bronchiolar mucosa, and aminophylline is of little or no benefit for that type of abnormality.

Iodides and Ammonium Chloride.—These are of value when there is a thick tenacious mucus and bronchiolar plugging, since these drugs tend to thin the bronchial secretion. It is in this phase of the pathologic condition—i.e., bronchiolar or bronchial obstruction with mucus—that bronchoscopy may at times be a lifesaving procedure. Carbon dioxide (5 to 8 per cent) with oxygen is also an effective expectorant and is useful in status asthmaticus.

The Parasympathetic Inhibitors.—Belladonna, hyoscyamus, lobelia and stramonium, by themselves, do not appreciably benefit the allergic asthmatic patient, though theoretically the drying effect of atropine should be of value. However, it makes the mucus more viscous, and this is an undesirable feature. The parasympathetic inhibitors do seem to have, however, some synergistic action when combined with expectorant and vasoconstrictor drugs in the treatment of asthma.

Apomorphine, too, seems to enhance the effect of the iodides, and ipecac at times is of value because of its expectorant effect, though it has been used in the past to the point of producing emesis. It substitutes effective retching for ineffective coughing.

Antihistaminic Drugs.—There is evidence that the antihistaminic drugs do not prevent the release of free histamine but rather avert the effect of histamine by combining with the site of action of that drug, thus blocking the histamine from exerting its effect locally on the shock tissue. It is believed that, given prophylactically, the antihistaminic drugs block the histamine as described above, and, when given to relieve existing symptoms, displace histamine from the site it occupies. In those forms of allergic disease in which the antihistaminic drugs do not prevent the allergic reaction from proceeding, or fail to decrease its severity, it is fair to assume that there is some other mechanism involved or that the antihistaminic drugs fail to displace histamine from its site of action at the shock tissue. It should also be noted that the antihistaminic drugs exert some local anesthetic action and are cerebral depressants.

**Pseudo-ephedrine, racephedrine, benzylophedrine, propadrine HCl, neosynephrine HCl, et cetera.

††Sympathin-I is a substance liberated in structures inhibited by sympathetic impulses.

Ergotamine.—Its beneficial effect in the treatment of that kind of migraine attributed to allergy is believed to be due to its vasoconstrictor effect on dilated cerebral vessels, but ergotamine seems to have no value in the treatment of other forms of allergic disease.

Helium and Oxygen.—Because helium has one-seventh the specific gravity of nitrogen, it saves respiratory effort when inhaled in an oxygen mixture, and it is at times of value in bronchial asthmatic attacks.

Hypertonic Glucose.—Possibly due to its osmotic effect which helps remove fluid from tissues, hypertonic glucose (50 to 100 c.c. of 50 per cent solution) at times gives relief to individuals with angioneurotic edema, persistent asthma or urticaria. In asthma, if aminophylline is added to the hypertonic glucose, the efficacy of each drug seems to be increased.

Sedatives.—These may benefit the allergic patient by diminishing the nervousness and sleeplessness which so often result when allergic phenomena occur. Likewise, in status asthmaticus the anesthetic effect of ether may be of value.

The use of morphine in asthma is to be strongly condemned. It should never be used, for it depresses the cough reflex so that patients cannot cough up the sticky sputum which blocks the bronchioles and is largely responsible for the symptoms of asthma; and, secondly, it depresses the respiratory center and increases the anoxemia in patients already suffering from oxygen want.

Vaccines.—There is not conclusive evidence that desensitization can be produced by therapy with bacterial vaccines, though respiratory vaccines may be of aid in preventing bronchitis. It is believed that any benefit in allergic disease resulting from vaccine therapy is on a nonspecific basis.

There is at present no conclusive proof that desensitization to histamine by histamine therapy can be accomplished; and even if this could be done, it might be an unwise procedure, for desensitization to such a widespread organic constituent as histamine could have far-reaching undesirable consequences.

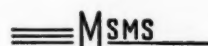
It should be pointed out that emotional disturbances can aggravate allergic symptoms as they

may other kinds of organic disease—e.g., coronary heart disease—and conversely, patients with allergic disease are perhaps more apt to be jittery and easily excited. It is not true, however, to say that emotional and nervous factors cause allergic disease. The antigen, wherever possible, should be sought out and appropriate therapy employed. An awareness that emotional disturbances can aggravate symptoms is important, however, so that common sense psychotherapy may be used where needed.

Summary

In this paper an attempt has been made to state briefly the rationale of therapy of allergic disease, to give the pharmacologic basis wherever possible, or in the absence of known pharmacology, to describe the theoretical basis for the more widely used forms of therapy of allergic disease.

432 W. Academy Street



SURGERY OF PORTAL HYPERTENSION

(Continued from Page 1010)

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Mesenteric Vascular Occlusion

By R. E. Johnson, M.D.
Flint, Michigan

MESENTERIC vascular occlusion is a long-recognized but quite uncommon clinical entity. However, despite its infrequent occurrence, its dramatic qualities are such that each instance is long remembered. It is the purpose of this paper to review briefly the etiology and clinical picture of this disease and to present a case of unusual etiology.

The widely varied etiologies of this condition can perhaps be most expediently presented by means of the following outlines:

Etiology of Mesenteric Venous Occlusion (Warren and Eberhard)

1. Known Infection—Including thrombophlebitis, appendicitis, pelvic abscesses, peritonitis, and general sepsis.
2. Hematogenous Causation—Blood dyscrasias or changes known to predispose to thrombosis, such as splenic anemia, and polycythemia vera.
3. Traumatic—Trauma of any sort to the mesenteric vessels, tearing of the mesentery, and trauma from abdominal operations.
4. Mechanical—Largest group. Portal stasis, pressure from tumors, pressure from adhesions or congenital bands. Volvulus and strangulated hernias not included.

Subsequently, two fatal cases of superior mesenteric venous thrombosis have been reported following procaine blocks of the lumbar sympathetic chain, and one following surgical ablation of this chain. No attempt was made to explain the mechanism of these untoward happenings.

The causes of sudden occlusion of the mesenteric arteries are not dissimilar to those causing occlusion of any peripheral artery. The following outlines are adapted from those of Collens and Wilensky:

Etiological Classification of Mesenteric Arterial Occlusion

A. Embolism.

1. Cardiac—Auricular fibrillation, myocardial infarct with mural thrombus, mitral and aortic valvulitis including that due to acute and subacute bacterial endocarditis, and a failing heart from any cause.

2. Arterial—Due to a mural thrombus arising from aneurysm, arteriosclerosis, trauma, or inflammation.
 3. Venous—Via patent foramen ovale.
- B. Thrombosis.
1. Inflammatory—Mycotic arteritis from any severe infection, and periarteritis nodosa.
 2. Degenerative—Arteriosclerosis.
 3. Traumatic—External trauma, surgical manipulation, gunshot and stab wounds.
 4. Simple—Heart disease, blood dyscrasias, volvulus, strangulated hernia and infectious diseases.

Although it is generally agreed that venous mesenteric occlusion is due to a thrombus, opinion is divided as to whether or not arterial mesenteric occlusion is predominantly embolic or thrombotic in origin. That occlusions of the superior mesenteric artery are more common than those of the inferior mesenteric artery is held by all to be due to its earlier exit from, and its more direct continuation of, the aorta. In general, it may be stated that the predominating causes of mesenteric occlusion in younger patients are heart disease and infection. In older patients, degenerative changes are the most important etiological agents.

The clinical picture of the condition is not definitely pathognomonic, and it is practically impossible to distinguish clinically between arterial and venous occlusion. Typically, one is confronted with an acute abdominal catastrophe most resembling intestinal obstruction, or strangulation or perforation of a viscus. Certain peculiar features are, however, usually present. The pain and shock are out of proportion to the rest of the findings. The pain overshadows the vomiting, whereas the reverse is true in ordinary upper intestinal obstruction. The physical examination varies as to degree of tenderness, rigidity, distention, and absence of peristaltic sounds. The abdomen is surprisingly much less tender than the degree of pain would lead one to expect. In general, there is no great constancy as to the location of pain and tenderness. Marked distention is infrequently present and rigidity is unusual. On occasion, an abdominal mass, due to thickened coils of intestine, may be palpated. Constipation is usually present. Blood per rectum is a helpful finding but is a very late occurrence. On occasion the vomitus may be bloody, tarry, or fecal in type. The finding on a plain film of the abdomen of ileus extending to the splenic flexure, and simulating a mechanical bowel obstruction in that area, has been reported

From Department of Internal Medicine, Hurley Hospital, Flint, Michigan.

in several cases of superior mesenteric thrombosis and has been suggested as a diagnostic aid.

Case Report

A seventy-one-year-old white man was last admitted to the hospital with abdominal and chest pain.

During the three preceding years, the patient had had numerous admissions for what were diagnosed as myocardial infarctions. These were characterized by epigastric and retrosternal pain and dyspnea. On two occasions, electrocardiograms revealed definite anterior myocardial infarctions. Auricular fibrillation was present throughout. On one occasion the pulse was 36 and regular, and it was necessary to discontinue digitalis to effect recovery from the complete AV block. On the last previous admission, heart failure was present.

His chief complaint, on the final admission, was of a nonradiating pain in the right upper quadrant and right retrosternal area which had had its onset some three hours previously. The pain was constant, but there were paroxysms of moderate severity lasting five to ten minutes. There was no nausea or vomiting. There had been a normal stool the previous day.

Physical examination revealed a well-nourished, well-developed male who was dyspneic and perspiring but who was not cyanotic. There was cardiac hypertrophy. There was a regular rhythm with a rate of 40, due to a complete AV block from over-digitalization. Blood pressure was 130/80. The lungs were clear. The abdomen revealed no rigidity, spasm, or rebound tenderness. An appendectomy scar was present. No masses or solid organs were palpable. Slight tenderness was present in the right upper quadrant. Abdominal auscultation was thought to be normal. A rectal examination was negative. Radial and femoral pulses were bilaterally present and equal.

Some hours following admission, the patient's pain became worse, and he began to vomit repeatedly. This eventually subsided, and although not entirely free from the paroxysms of pain, he was improved to the extent that an electrocardiogram and chest x-ray were taken. Later, the pain and vomiting recurred and progressed in severity almost without interruption. He became dyspneic and perspired profusely. The pulse became rapid and irregular. He maintained a position on his right side with his knees flexed on the abdomen. There was marked tenderness in the right upper quadrant and epigastrium. There was no definite rigidity, although the patient voluntarily resisted palpation. There was no appreciable distention. Some bowel sounds were present.

A chest film showed cardiomegaly and emphysema. A flat plate of the abdomen revealed no free air, or ileus pattern suggesting a mechanical obstruction in the region of the splenic flexure. An electrocardiogram showed advanced heart damage and auricular fibrillation. The serology was negative. The serum amylase and urinalysis were within normal limits. The initial blood count was within normal limits; the final count revealed hemoglobin concentration and a leukocytosis of 34,900.

The patient gradually became worse. Abdominal findings did not change. There was no appreciable disten-

tion. Death occurred three days and eighteen hours following admission. There was only a slight temperature elevation. At no time was there blood found per rectum.

An autopsy was performed. The heart was found to be enlarged. Coronary sclerosis was present. There was no acute coronary occlusion; however, the scars of two old infarcts were present. No mural thrombus or valvular disease was evident. No gastric pathologic condition was found. The peritoneum was not greatly involved; there was very little ascitic fluid. The jejunum and ileum showed the reddish purple color changes of early gangrene; the remainder of the ileum was a bright red. The initial large bowel was also discolored.

In the abdominal aorta, just below the coeliac axis was a large mural thrombus, having its origin in an arteriosclerotic plaque and its free end embedded in, and completely occluding, the orifice of the superior mesenteric artery.

Although the above case was in many ways fairly representative of mesenteric arterial occlusion, there were several unusual features present. The site of the aortic thrombus was unusual in that their occurrence proximal to the superior mesenteric artery is rare. Due to its size and location, the thrombus did not produce the picture of occlusive disease in the lower extremities, so typical of aortic thrombosis. The complete occlusion of the base of the artery by such a mechanism is unusual, as in the intermittency of the symptoms.

Autopsy revealed no occlusions of individual peripheral branches of the superior mesenteric artery. In retrospect, one might postulate that the intermittency was due to a ball valve action by the body of the thrombus, as it lay free in the aortic current, producing transient anoxemia along the course of the superior mesenteric artery. The final picture presented when the thrombus became firmly embedded in the arterial orifice.

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University of Michigan

Postgraduate Courses

CLINICAL EXERCISES FOR PRACTITIONERS

Wednesday, October 19 to December 14, 1949

January 4 to May 10, 1950.

- 10:00 a.m.-12:00 noon—Attendance at surgical ward rounds and surgical operations.
1:30 p.m.- 5:00 p.m.—Surgical exercises arranged especially for practitioners. These will include clinics, lectures, and demonstration in General Surgery and all the surgical specialities.
7:45 p.m.- 9:00 p.m.—Surgical Staff Conference in clinical amphitheatre.

* * *

CLINICAL INTERNAL MEDICINE

Thursdays, October 6 to December 15, 1949

January 5 to April 20, 1950

Arrangements have been made to meet the demands of practicing physicians for further training in internal medicine by offering a clinical teaching program every Thursday afternoon, beginning October 6 and continuing through December 15, 1949. The schedule will be resumed on January 5, 1950, and continued through April 20, 1950. Patients will be presented on ward rounds conducted by two members of the senior staff of the Department of Internal Medicine. The period will end with a conference of the entire medical staff and a review of recent interesting electrocardiograms.

* * *

PEDIATRICS

University Hospital

October 19-22, 1949

This postgraduate course in pediatrics is arranged for physicians who are especially interested in the field of pediatrics and communicable diseases. It includes a few lectures pertinent to special problems in pediatrics, but primarily it will consist of case presentations with discussions as to diagnosis and management of the special problems.

The faculty will include Doctor James L. Wilson and staff, and guest lecturers.

* * *

EXTRAMURAL PROGRAM

University of Michigan Department of Postgraduate Medicine

Autumn, 1949

The Michigan State Medical Society, in co-operation with the University of Michigan Medical School, Wayne University College of Medicine, and the Michigan Department of Health, announces the extramural postgraduate courses for the autumn, 1949.

<i>Centers</i>	<i>Dates</i>
Adrian	October 27
Alpena	October 27
Battle Creek.....	November 1
Bay City.....	October 26
Flint	October 25
Jackson	October 18
Lansing	November 29
Midland	November 18
Mt. Clemens.....	October 5 and November 2
Muskegon	November 2
Traverse City.....	October 13
Upper Peninsula:	
Escanaba	November 8 and 9
Houghton	November 10 and 11
Iron Mountain.....	November 9 and 10
Ironwood	November 10 and 11
Marquette	November 9 and 10
Menominee	November 8 and 9
Sault Ste. Marie.....	November 11 and 12

Printed Programs will be mailed to members of MSMS during September.

* * *

Requests for information should be addressed to

HOWARD H. CUMMINGS, M.D., Chairman

Department of Postgraduate Medicine

University Hospital, Ann Arbor, Michigan

To Improve People's Health

As one approaches the end of his administrative duties and reviews the events of his term of office, he quickly realizes he is but a small cog in a highly complicated machine.

I am sincerely appreciative of the assistance and advice of past and present officers of the Michigan State Medical Society, particularly from our two immediate past presidents, Wm. A. Hyland, M.D., and P. L. Ledwidge, M.D. Because one graduates to the rank of past president does not mean that he loses his interest in the affairs of organized medicine. I hope that I can emulate the continued accomplishments and activities of these two physicians and that my enthusiasm for our national and state societies will never be lessened.

In an organization such as the Michigan State Medical Society, with the many and varied problems confronting its administration, the work of the House of Delegates and of the fifty-four committees is of inestimable value. Their time-consuming study of details and implications of problems, and their decisions as to procedures, have proven of great aid to our Councilors and to the President in the activation of the most progressive program of any state medical society in the country. I wish to express my thanks and appreciation to the 298 committee members and the 121 delegates who are laboring so strenuously in the interest of Michigan Medicine.

No group of officers alone can run an organization. Information as to activities, programs and problems, and their activation on a local level depend upon the presidents, secretaries, and CAP committees of our fifty-five county and district medical societies. Upon these county officers rests the success of the entire State Society activities. Theirs is the job of continuous stimulation of all our members. They deserve much commendation for a superb accomplishment the past year.

It is a revelation to realize the amount of correspondence, attention to minutia and details, and the unceasing future planning that takes place in our executive office. Orchids are hereby tendered to Secretary L. Fernald Foster, M.D., Executive Director Bill Burns, Public Relations Counsel Hugh Brenneman, and the entire secretarial staff for their cheerful and prompt acceptance of work that we have loaded on their shoulders.

Truly, the Michigan State Medical Society is a great organization; all its members are vitally interested in its ultimate objective—the improvement of the health status of the people of Michigan.

E. F. Sladek, M.D.

President, Michigan State Medical Society

President's



Page

Editorial

ROUND AND ROUND THEY GO

THE FOURTH ROUND of negotiations for increases of compensation to labor is now in progress. The leaders of labor announced last year that the emphasis for 1949 would be health, welfare, and social security benefits, with wages a minor consideration. As this is being written, conferences are now in progress with the automobile and steel industries. Labor demands certain benefits. They use the word "demand" rather than "request." Among these benefits are hospital service and medical service for not only the employee but also his family. They are also asking a rehabilitation program.

Labor officials are fearful of the catastrophies which result when serious illness strikes a family and many times wipes out reserves that have been accumulated or saddles the family with indebtedness which must be paid in the future because budgeting had not been done. They admit that a family can budget through the Blue Cross and Blue Shield prepayment plans and be quite secure, but if this is done voluntarily many neglect it. For this reason they have supported the compulsory system of service, the federal government program, in order to assure their people a measure of security. Labor leaders, however, are making every effort in their power to provide for health services under the voluntary plans so far as medicine is concerned. They are demanding that industry pay the premiums and make the coverage complete for all employees.

Labor's present demands of the automobile industry are similar to those secured in the Kaiser-Frazer contract—a contribution from industry of a fund which will be administered by a joint co-operation, four representatives of industry, four representatives of labor and a ninth impartial person to be selected by this group of eight persons. This Board of Control will administer the health and welfare fund for the benefit of all the labor. Under such a contract, Michigan Hospital Service and Michigan Medical Service are carrying the Kaiser-Frazer group. The Hospital Service has proven satisfactory. A recent survey of a large number of consecutive cases shows that the hospital bills were paid 96.9 per cent.

The Medical Service has not been so acceptable. The work done and the care given is not criticized but about 80 per cent of the bills rendered had an additional charge not entirely covered by the contract. And a careful study made by Kaiser-Frazer Control officials shows that the medical service paid 62 per cent of the total of all bills, leaving the worker to pay \$38 out of each \$100 of gross bills. The Union negotiators appreciate that this results from the fact that when our plans were set up, the \$2,500 income level was established, which covered 85 per cent of workers. The premium rates and payment rates to doctors were established on that basis. The income level has not been changed. The premium rates are the same as established in 1942, and the payments to the doctors have been increased only in some items. Payments for services have not been adjusted to the level of earnings of the workers, which is on the average someplace between \$3,100 and \$4,000 per year.

Under the medical service contract the doctor is entitled to readjust his fees, commensurate with what he would normally charge a person earning the higher amount. We think we can see, as an outcome of these present negotiations, a necessity for a revision of our contract or a new one which will carry a necessarily higher premium rate and higher compensation for the physician in many items. Labor officials admit this fact, but question the size of the premiums and demand that the new contract be a service affair, not an indemnity. Michigan Medical Service board members are studying this problem, but the members of the Michigan State Medical Society can help materially in ironing out health service difficulties if they will temper the extra charges submitted.

A few years ago the American Medical Association had an opportunity to confer with labor at the high level and make adjustments which would be advantageous and satisfactory to both parties. Labor is one of our greatest consumers and must be able to purchase the services they require. We use this word "purchase" judiciously because we believe that a proper understanding could remove from labor their urge for compulsory

socialized medical plans. We believe the way is open for a wise solution of much of the unrest which is forcing social evolution and foreboding the socialistic state.

In the matter of rehabilitation, labor interests demand a change. In the main they do not want an allowance of \$25 or \$35 per week for a man who has become incapacitated through industrial accidents, diseases or conditions. They are now asking that that man be rehabilitated so that he may earn his own living and re-enter industry.

NATIONAL PLANNING

INFORMATION is leaking out of political councils to the effect that the Administration forces, which are advocating socialized medicine, plan to make the 1950 political campaign a proving ground. Five states are to be selected where the candidates are outspoken advocates of the compulsory national health program of Truman, Ewing, Murray, Pepper, Falk, et al. The whole force of bureaucratic and other machinery will be concentrated in these five states. If the socialized medicine candidates win, the drive will be on throughout the nation. If they are defeated, nobody knows what the next step will be. Until the American people can be thoroughly taught, and convinced that we do not want state socialism nor any part of it (and socialized medicine is a part of it) this threat will be ever present and we in medicine must be prepared to continue America's fight for personal independence.

BEWARE—AND REMEMBER

DOCTORS are beginning to think that the fight to prevent socialized medicine has been won, and that we may now relax. Congress seems to have arrived at a point where it is hesitant to pass any mammoth tax-supported measure. Its members are in large numbers telling us the threat is not immediate. As unsuspecting doctors we are glad to accept the notion and congratulate ourselves for a job well done.

That is just the attitude the socializers have hoped we would take. Their job is just so much easier. We, as a profession, are inclined to and wish to believe that the threat is getting less acute, and we will have ample time to get at work again when and if the occasion arises. Senator Vandenberg told us over a year ago that the

socializers could enact a calamitous law in very short order if they decided to do so.

Those of us who served during and after the first World War will have no difficulty in remembering what happened to veterans benefits in the 73rd Congress. Veterans Hospitals and Veterans Administration had been established to care for the injured or ill veteran whose disability was service connected. That is a traditional benefit veterans have had during all the history of our country, and no questions were asked. During the years just following the war it had become custom that a veteran whose disability was not "service connected" could be cared for in the veterans hospitals if beds were available. Some complaint and criticism arose, but mostly this situation was accepted.

A wave of economy struck in 1933, and Public Law 2 of the 73rd Congress was *passed within one day, without hearing and no notice given to veterans* who would be most vitally affected. Veterans whose service connection had not been accepted were thrown out of the hospitals by the thousands, with no place to go. And that was not the worst. An Executive order was issued canceling the service-connection files of all veterans who were getting disability benefits, and they were ordered to re-establish the proof of their service connection. This was fifteen years after the close of the war, and this effort became an almost unsurmountable one for thousands. It took years to partially correct this one day's legislative work.

With the experience of the veterans a few years ago, it is not safe to ignore sudden semi-secret action which might take place in Washington, depriving the medical profession of its independent status and throwing upon us the burden of reversing a policy which might be adopted. The doctors in England are now struggling against a social movement which is almost irreversible. If the same thing happened in America our fight would be long and very much up hill because so-called social reforms, once adopted, are almost permanent. Medical men should know that it is much easier and safer to prevent than correct.

BLUE SHIELD AND THE AMERICAN MEDICAL ASSOCIATION

ON JUNE 23, 1948, the House of Delegates of the American Medical Association instructed its officers to secure Blue Cross-Blue Shield cov-

EDITORIAL

erage for the American Medical Association headquarters employees. That was not done. Resolutions were presented at the June, 1949, meeting and the following action was taken:

Resolution on Blue Shield Coverage of American Medical Association Employees: Your reference committee has found that the plan employed for servicing the employees of the American Medical Association is one of several approved by the Illinois State Medical Society. While this plan is not a Blue Shield plan, it was recommended to the Board of Trustees by a committee of the employees after due consideration. There has been no evidence presented to your committee of any dissatisfaction among the employees affected. Your committee believes that in a choice between two approved plans the decision of the local parties involved should be upheld. It further believes that every sincere effort was made to carry out the directive of the House of Delegates. It therefore recommends that the House of Delegates hereby **RESCIND ITS ACTION** of June 23, 1948, wherein it said: "Your committee recommends because of the above stated opinions that at the expiration of the present contract of hospital and medical health coverage, the American Medical Association, through its proper officials, make every sincere effort to procure this coverage for its employees through Blue Cross-Blue Shield local organization. Your committee understands that this coverage is and will be available by substituting for the words 'Blue Cross-Blue Shield local organization' the words 'any approved voluntary health insurance plan.'"

On June 9, 1949, further action was as follows:

"Supplementary Report of Council on Medical Service (a) Approve Complete and Absolute Separation of A.M.C.P. from A.M.A.: Your reference committee recommends that we approve complete and absolute separation of A.M.C.P. from the American Medical Association, and that we adopt the joint statement of the Board of Trustees and the Council on Medical Service as printed in the Handbook. Your committee approves this and recommends that you approve it."

Blue Shield, which is the doctors' program for prepaid medical service, has grown up. The program was started at the state and county level throughout the nation and has proved unbelievably successful in spite of begrudging support from the national headquarters. In fact the contacts from national headquarters have, at many stages, proven a hindrance rather than a help. We believe the associated medical care plans are to be congratulated upon this present action of the House of Delegates. Now, they will be permitted to grow and to supply the demands of our public with supervision from the state level where understanding and sympathetic co-operation are prevalent.

GRAND RAPIDS

THE SESSION of the Michigan State Medical Society for September 20-24, 1949, will be held in the city of Grand Rapids.

Grand Rapids was founded as an Indian Trading Post in 1826 and has become one of our metropolitan areas. A feature which is almost unique is the arrangement for conventions, the Civic Auditorium with its spacious meeting halls and its underground connection with the hotel in case of inclement weather. The auditorium will seat 5,000 persons and at its north end is a stage, 98 feet wide and 36 feet deep, completely equipped with scenery props, full-size switchboard and footlights. There is an orchestra lift which can lift a full symphony orchestra from the basement to the stage. The auxiliary auditorium, the Black and Silver Room, is very beautiful and will seat 800 persons. Complete voice amplification is provided, also air cooling by which the temperature can be regulated to 70 degrees.

The exhibit space is 44,000 square feet. For recreation in connection with the sessions, there are several country clubs — Blythefield, Cascade Hills, Green Ridge, Highland and Kent; also municipal and other popular places such as Grace Field, Indian Hills, and Ridgmoor. There are 250 lakes and trout streams for fishing and boating within an hour's drive of Grand Rapids. The city is located on four main railroads and numerous state highways.

We are anticipating a record-breaking meeting for 1949!



BLYTHEFIELD SWIMMING POOL

Who's Who in MSMS

Roy Herbert Holmes, M.D., Editor, 1940-1942

An outstanding career as editor of a medical journal was cut short by World War II as Roy Herbert Holmes, M.D., Muskegon physician, turned in his "blue pencil" for the uniform of a medical officer in the Army of the United States.

Dr. Holmes, the seventh editor of *THE JOURNAL*, ascended the editor's chair following Dr. James H. Dempster of Detroit. From January, 1940 until mid-October of 1942 he served the medical profession well as *THE JOURNAL* continued its rise to a position of prominence in the medical publication field.

The career of the Muskegon physician-editor began in Grand Rapids in 1896. He gained his pre-medical education at Kalamazoo College and the University of Michigan College of Liberal Arts. He received his Degree in Medicine from the University of Michigan Medical School. Post-graduate work in dermatology included study periods at both New York Skin and Cancer Clinic and the Cook County Graduate Medical College.

Dr. Holmes is affiliated with the American College of Surgeons, American Industrial Physicians and Surgeons, Michigan Industrial Physicians and Surgeons, American Academy of Dermatology and the Detroit Dermatology Society.

In addition to serving as editor of *THE JOURNAL*, Dr. Holmes served two terms as Councilor of the MSMS from the Eleventh District and has been a Delegate to The House of Delegates of the MSMS.

Dr. Holmes was commissioned Major in the Medical Corps, A.U.S., August 22, 1942, and served as Dermatologist and in various other medical assignments at Camp Hulen, Texas. He completed the course in Tropical Medicine at the Army Medical School in Washington, D. C., in 1943, and was reassigned to Camp Hulen where he was Camp Medical Inspector and Venereal Disease Control Officer until a change of station was effected. In 1944 he was assigned as Dermatologist in the Regional Hospital in Camp Polk, Louisiana, and later at Camp Bowie, Texas. In



ROY HERBERT HOLMES

1945 he was retired and returned to Muskegon. In November of that year he resumed the private practice of dermatology in that city. At present Dr. Holmes is a member of the Reserve Officers Association. Other civic duties include active membership in the American Legion and Muskegon Chamber of Commerce.

The long hours spent by Dr. Holmes during his tenure as editor will long be remembered by the members of the Michigan State Medical Society. Under his active guidance, *THE JOURNAL* chronicled the medical and socio-economic events of the day. It was his foresight, intuition and way with words that stamped the publication as one well worth reading. He championed those causes which meant advances for Medicine while he zealously fought off the attempts to injure and degrade the profession to which he had dedicated his life.

The Michigan State Medical Society will forever be grateful for the time and effort expended by Dr. Roy Herbert Holmes to make *THE JOURNAL* MSMS one of the top medical journals in our land.

Help Break the Registration Record

Records are made to be broken—and with this thought in mind the Michigan State Medical Society is out to smash all registration figures for its Annual Sessions to be held in Grand Rapids. Pointing to the most outstanding array of medical speakers and teachers ever to appear on a Michigan State Medical Society platform and to the complete convention facilities offered by Grand Rapids, the officers of the Society feel certain that the 1947 attendance total of 2,110 doctors will be surpassed this fall by several hundreds.

plete with medical GREATS from more than fifteen states. Outstanding teachers and clinicians from the nation's largest and finest medical schools will share their discoveries of the past twelve months with those who are serving in the field. A glance at the program as printed elsewhere in THE JOURNAL will show that attendance at Grand Rapids is a "must" for the progressive doctor of medicine. Nothing but profit lies ahead.

In addition to the formal lectures, the exhibits this year will be the largest and finest ever pre-



"HOUSE OF FRIENDSHIP"—MANNED BY MSMS OFFICERS

Significant, too, is the fact that Michigan's physicians and surgeons, now intensely and devotedly engaged in a battle to stem the socialization of their profession, will take time from this fight to meet in a four-day Post-Graduate Session in order that their services may be all the more valuable to the patients they serve.

At the 1949 Michigan State Medical Society Session, the medical profession of this state will hear and see the newest in medical and surgical techniques. Michigan's doctors will listen and ask questions; they will view new apparatus and equipment; all this will result in better trained and better informed healthmen for the people of Michigan.

The program for the 84th Annual Session is re-

sented. The scientific and technical exhibitors will portray the latest in medical development. A trip through the exhibits will take the place of several hundred salesmen's calls.

The finest all-round program ever presented at any of the Annual Sessions should certainly stimulate you and you—the doctors of medicine in a state that is pointing the way to other states—to register for the 84th Annual Session and Post-Graduate Conference to be held this September 21-22-23-24 in Grand Rapids. Every doctor who registers will be helping to set a new attendance record—a record which will testify to the sincerity and devotion to duty of Michigan's men of medicine, and to their unquenchable thirst for more education and improvement in their profession.

The 84th Annual Session and Postgraduate Conference and Cancer Control Day

Pantlind Hotel-Civic Auditorium, Grand Rapids,
September 21-22-23-24, 1949

ANNUAL SESSION INFORMATION

DIRECTORY

Headquarters—Pantlind Hotel—Civic Auditorium, Grand Rapids

Registration—Civic Auditorium

MSMS House of Friendship—Civic Auditorium, opposite Registration Desk

General Assemblies—Black and Silver Ballroom, Civic Auditorium

Exhibits—Civic Auditorium, Exhibit Hall.

Press Room—Parlor F, Civic Auditorium

Woman's Auxiliary Headquarters—Pantlind Hotel

* * *

◆ Register—Civic Auditorium, Grand Rapids—as soon as you arrive.

Hours: Tuesday, September 20—1:00 to 5:00 p.m.
Wednesday, September 21—7:30 to 5:00 p.m.
Thursday, September 22—8:30 to 5:00 p.m.
Friday, September 23—8:30 to 3:30 p.m.

NO REGISTRATION FEE FOR AMA AND CANADIAN MA MEMBERS.

Admission will be by badge only to all Scientific Assemblies and Section Meetings.

Bring your MSMS or CMA Membership Card to expedite registration.

* * *

◆ GUESTS—Members of the American Medical Association from any state, or from a province of Canada, and physicians of the Army, Navy and U. S. Public Health Service are invited to attend, as guests. No registration fee. Please present credentials at the Registration Desk.

Bona fide doctors of medicine serving as interns, residents, or who are associate or probationary members of county medical societies, if vouched for by an MSMS Councilor or the president or secretary of a county medical society, will be registered as guests. Please present credentials at the Registration Desk.

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◆ MICHIGAN DOCTORS OF MEDICINE, not members, if listed in the American Medical Directory, may register as guests upon payment of \$5.00. This amount will be credited to them as dues in the Michigan State Medical Society **FOR THE BALANCE OF 1949 ONLY**, provided they subsequently are accepted as members by their County Medical Society.

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◆ DOCTORS, register Tuesday! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday, Thursday, Friday, during the 1949 MSMS Annual Session. The Tuesday afternoon registration hours are arranged so that physicians

may avoid waiting in line Wednesday morning before the opening General Assembly.

We recommend to Grand Rapids physicians—and those who arrive in Grand Rapids on Tuesday—that they register Tuesday, September 20, from 1:00 to 5:00 p.m., Civic Auditorium, Grand Rapids.

* * *

◆ TELEPHONE SERVICE—Local and Long Distance telephone service will be available at entrance to Black and Silver Ballroom in the Civic Auditorium, as well as in the Pantlind Hotel. In case of emergency, doctors will be paged from the meetings by announcement on the screen. During meetings call 9-1313, 9-1156, 9-1751. At other hours, call the Pantlind Hotel, 9-7201, or the Registration Desk in the Exhibit Hall, Civic Auditorium, 9-1145.

* * *

◆ GUEST ESSAYISTS are very respectfully requested not to change time of their lecture with another speaker without the approval of the General Assembly. This request is made in order to avoid confusion and disappointment on the part of some members of the audience.

* * *

◆ THE MSMS "HOUSE OF FRIENDSHIP" will be located opposite the Registration Desk in the Civic Auditorium. All members are invited to stop at the "House of Friendship" and chat with the MSMS officers who will man the House at all times.

* * *

◆ STATE SOCIETY NIGHT—Thursday, September 22, 1949, 10:30 p.m. Cabaret-style dance and entertainment for all who register and their ladies. Ballroom, Pantlind Hotel, Grand Rapids.

Program of the floor show:

- * DeForest Poole's rhythmic orchestra
- * Jack Herbert, M.C. and amazing magic
- * Dennis and Darlene, songsters in the modern style
- * King and Zorita, astonishing readers of the mind.

PAPERS WILL BEGIN AND END ON TIME

Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all the speakers will be required to begin their papers exactly on time and to close exactly on time, in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper.

ANNUAL SESSION INFORMATION

◆ **"UBIQUITOUS HOSTS"**—The following Grand Rapids doctors of medicine have placed themselves at the disposal of the twenty-eight visiting guest essayists who are on the program of the 84th Annual Session in Grand Rapids; they will demonstrate the meaning of Michigan hospitality to the eminent speakers from other parts of the United States: N. L. Avery, Jr., M.D., Gordon W. Balyeat, M.D., Carl B. Beeman, M.D., Donald Boersma, M.D., Leon C. Bosch, M.D., Wm. J. Butler, M.D., Luther C. Carpenter, M.D., David B. Davis, M.D., Joe De-Pree, M.D., Robert H. Denham, M.D., Leon DeVel, M.D., Mark W. Dick, M.D., George T. R. Fahlund, M.D., Lynn A. Ferguson, M.D., J. Donald Flynn, M.D., D. R. Heetderks, M.D., A. M. Hill, M.D., John T. Hodgen, M.D., W. A. Hyland, M.D., Horace C. Jones, M.D., Richard H. Meade, Jr., M.D., L. Paul Ralph, M.D., Richard A. Rasmussen, M.D., D. M. Schuitema, M.D., E. F. Sladek, M.D. (Traverse City), Paul W. Willits, M.D., Ray Vander Meer, M.D., and Paul A. VanPernis, M.D.

Sincere thanks are extended these hosts for their tangible help in making the MSMS Annual Session of 1949 an outstanding success.

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◆ **PUBLIC MEETING**—The evening assembly of Wednesday, September 21, 1949—Officers Night—will be open to the public. Invite your patients and other friends to this interesting meeting. The program (complete on Page 1047) is highlighted by:

8:30 p.m. President's Address
Induction of President-Elect
10:00 p.m. Biddle Lecture

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◆ **TRANSPORTATION**—The C. & O. Streamliners afford a convenient means of transportation to the MSMS Annual Session in Grand Rapids for hundreds of physicians in the central and southeastern part of the State. Order reservations well in advance.

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◆ **THE ANNUAL COMMITTEE ORGANIZATION** luncheon, a meeting of the MSMS committee chairmen appointed by President-elect W. E. Barstow, M.D., St. Louis, to serve during the year 1949-50, will be held on Thursday, September 22, at 12:00 noon in Rooms 322-324 of the Pantlind Hotel.

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◆ **THE MSMS HOUSE OF DELEGATES** convenes Monday, September 19, at 10:00 a.m., Ballroom, Pantlind Hotel; it will hold two meetings on Monday, September 19, at 10:00 a.m. and at 8:00 p.m.; also two meetings on Tuesday, September 20, at 10:00 a.m. and at 8:00 p.m. **PRE-REGISTRATION OF DELEGATES WILL BE HELD SUNDAY, SEPTEMBER 18 FROM 8:00 TO 10:00 P.M. PLEASE REGISTER IN ADVANCE, TO SPARE YOURSELF STANDING IN LINE MONDAY MORNING.**

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◆ **TECHNICAL EXHIBITS**—132 spaces—will open daily at 8:30 a.m. and close at 5:30 p.m. Frequent interruptions to view the exhibits have been arranged before, during, and after the General Assemblies. **PLEASE REGISTER AT EACH BOOTH.**

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◆ **SUBSCRIPTION LUNCHEONS**—Section Meetings, Wednesday, Thursday, Friday, September 21-22-23, Pantlind Hotel, 12:15 to 1:30 p.m., with a thirty-minute scientific address following each luncheon.

See Program, Pages 1046, 1049, 1053.

THE WOMAN'S AUXILIARY TO THE MICHIGAN STATE MEDICAL SOCIETY will present an attractive social and business program at the Pantlind Hotel, Grand Rapids, to which the wife of every MSMS, AMA and CMA member is cordially invited.

Woman's Auxiliary courtesy rooms, available Tuesday-Wednesday-Thursday-Friday, will be Parlors A and B on the Mezzanine of the Pantlind Hotel.

◆ **SIX ASSEMBLIES AND ONE GENERAL MEETING**, Wednesday, Thursday, Friday, September 21-22-23 (see Pages 1045-1054).

* * *

◆ **INFORM YOUR NEWSPAPER EDITOR** that you are attending the Michigan State Medical Society Annual Session and Postgraduate Conference in Grand Rapids on September 21-23.

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◆ **INCOME TAX DEDUCTION**—Expenses incurred in attending conventions of professional societies have consistently been held deductible in the income tax returns of doctors, both in the United States and Canada. Certificates of attendance available upon request to 2020 Olds Tower, Lansing 8, Michigan.

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◆ **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan State Medical Society Annual Session and at the Cancer Control Day.

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◆ **THE KENT COUNTY MEDICAL SOCIETY HOSPITALITY BOOTH** will be located in the lobby of the Pantlind Hotel.

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◆ **MSMS SPEAKERS BUREAU CONFERENCE**, Thursday, September 22, 5:00 to 10:30 p.m. in the Schubert Room, Pantlind Hotel. Moderator: Paul D. Bagwell of Michigan State College, East Lansing, Michigan.

TWENTY DISCUSSION CONFERENCES

These quiz periods will be held Wednesday and Thursday, September 21-22, at 5:00 to 6:00 p.m. and on Friday, September 23, at 4:30 to 5:30 p.m. An opportunity to ask questions concerning the presentation of the guest essayist, or to discuss one of your interesting cases with them, will be provided.

WEDNESDAY: Discussion Conferences on Surgery, Medicine, Anesthesiology, Dermatology, Obstetrics, Pediatrics and General Practice.

THURSDAY: Discussion Conferences on Obstetrics and Gynecology, Otolaryngology, Public Health and Preventive Medicine, Surgery, Medicine, and Ophthalmology.

FRIDAY: Discussion Conferences on Medicine, Syphilology, General Practice, Nervous and Mental Diseases, Surgery, Pediatrics and Radiology.

ANNUAL SESSION INFORMATION

♦ MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS

1. The Michigan Academy of General Practice will hold its second Annual Meeting, Thursday, September 22, at 8:00 p.m. in the Furniture Club, Pantlind Hotel. After the business meeting and election of officers, a reception honoring national AAGP President E. C. Texter, M.D., Detroit, will be held.
2. The Michigan Chapter of the American College of Chest Physicians will hold a dinner-meeting on Thursday, September 22, at 6:00 p.m. in Room 322, Pantlind Hotel. George W. Wright, M.D., Saranac Lake, N. Y., will talk on "Physiology of Pneumococcosis." All members of the Michigan State Medical Society are cordially invited.
3. The Michigan Neuro-Psychiatric Association will hold a dinner-meeting on Friday, September 23, at 7:00 p.m. in The Schubert Room, Pantlind Hotel. The Program will feature R. W. Waggoner, M.D., Ann Arbor, Professor of Psychiatry, University of Michigan, who will discuss "Antabuse," the new drug in the treatment of alcoholism; Russell N. DeJong, M.D., Ann Arbor, Associate Professor of Neurology, University of Michigan, who will speak on "Newer Drugs in the Treatment of Extrapyramidal Diseases"; and Willard W. Dickerson, M.D., Caro, who will discuss "Newer Drugs in the Treatment of Convulsive Disorders." Franklin G. Ebaugh, M.D. of Denver, Assembly speaker at the MSMS Annual Session, has been invited to participate in the discussions of the Michigan Neuropsychiatric Association.
4. The Detroit Proctologic Society will meet on Thursday, September 22, in Room 222, Pantlind Hotel. Dinner at 6:00 p.m. followed by a short business session at 7:00 p.m. at which time the Michigan Proctologic Society will be formed. Louis J. Hirschman, M.D., Detroit, will report on the newly formed American Board of Proctology. Dr. Hirschman's presentation will be followed by three 15-minute scientific papers, presented by members of the Society.
5. Michigan Medical Service membership will meet for luncheon on Tuesday, September 20, at 1:00 p.m. in the Schubert Room, Pantlind Hotel, Grand Rapids, followed by a meeting at 2:00 p.m. in the Ballroom, Pantlind Hotel.
6. Loyola University Alumni dinner-meeting is scheduled for Thursday, September 22, 6:30 p.m. in Room 327, Pantlind Hotel. Wives of Alumni cordially invited.
7. The Michigan Diabetes Association meets for dinner on Wednesday, September 21, at 6:00 p.m. in Room 322 of the Pantlind Hotel.
8. Wayne University Alumni Association will hold open-house in Parlor D of the Pantlind Hotel on Wednesday, Thursday, Friday, September 21-22-23, all day and evening. The Wayne University Medical College Alumni dinner will be held Wednesday, September 21, at 6:30 p.m., Room 328, Pantlind Hotel. John F. Failing, Grand Rapids, is chairman of arrangements.
9. Detroit Ophthalmological Society will meet for dinner on Thursday, September 22, at 6:30 p.m. in the Sadler Lounge, Pantlind Hotel.
10. The Michigan Medical Assistants Society will hold its organization meeting Thursday, September 22, in the Morton Hotel. The Medical Assistants group is composed of doctors' office secretaries and nurses. Doctors of Medicine of Michigan, Ohio, Indiana, Wisconsin, Illinois and Ontario are urged to encourage their office assistants to attend this informative conference. No registration fee.

11. "Fifty-Year Club" of the Michigan State Medical Society will convene in the Red Room of the Pantlind Hotel at 8:15 p.m. on Wednesday, September 21, to organize, prior to induction into membership in the Club on the occasion of Officers Night ceremonies at 8:30 p.m. in the Ballroom of the Pantlind Hotel.
12. The Michigan Society of Anesthesiologists annual dinner-meeting will be held at the University Club, Grand Rapids, September 21, at 6:30 p.m. Annual election of officers. Guest of honor will be John Lundy, M.D., Rochester, Minn.
13. Alpha Kappa Kappa Fraternity will meet for dinner on Thursday, September 22, 1949 at the Ferguson-Droste-Ferguson Rectal Clinic and Hospital, Grand Rapids. Time: 6:30 p.m.

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♦ MEDICAL ASSISTANTS CONFERENCE

Thursday, September 22

Program

- 11 A.M.—Registration—Morton Hotel
- 2 P.M.—Business Meeting
Organization of State Medical Assistants Society
Adoption of a Constitution
- 4 P.M.—"The Medical Assistant, the Doctor and Public Health"—JOHN A. COWAN, M.D., Lansing
Director of Tuberculosis and Venereal Disease Control, Michigan Department of Health
- 4:30 P.M.—Intermission to view exhibits
- 6 P.M.—Cocktail Hour—Morton Hotel
- 7 P.M.—Dinner—Morton Hotel

* * *

♦ **REGISTER AT EVERY BOOTH**—there is something of interest or education in the large exhibit of technical and scientific displays. Stop and show your appreciation of the exhibitors' support in helping to make successful the 1949 MSMS Convention.

* * *

♦ **POSTGRADUATE CREDITS** are given to every MSMS member who attends the 84th Annual Scientific Session of the Michigan State Medical Society, Wednesday, Thursday, Friday, September 21-22-23, 1949, in Grand Rapids.

* * *

♦ **CANCER CONTROL DAY**, Saturday, September 24, Ballroom of the Pantlind Hotel (program on page 1055). Subscription luncheon, following the morning's scientific program, will be held in the Furniture Club of the Pantlind Hotel at 12:15 p.m.

* * *

SAVE AN ORDER FOR THE EXHIBITOR AT THE MSMS ANNUAL SESSION



THE PANTLIND



HERBERT ACUFF



H. E. BACON



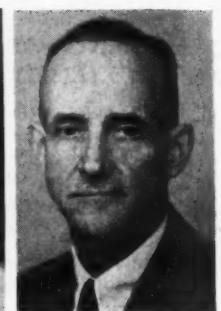
J. S. BAER



W. B. CASTLE



A. R. COLWELL



EDWIN DAVIS



W. J. DIECKMANN



F. G. EBAUGH

*Guest
Speakers*



F. H. FALLS



R. E. GROSS



L. E. HIMLER



A. S. JACKSON



R. L. JACKSON



J. S. LUNDY



R. J. MCQUISTON



H. C. MILLER



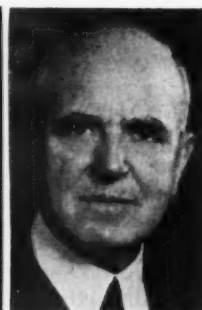
J. E. MOORE



E. D. OSBORNE



J. P. PETERS



D. B. PHEMISTER



U. V. PORTMAN



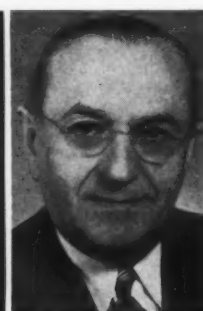
E. C. REIFSTEIN, JR.



R. O. RYCHENER



A. P. STOUT



MAX THOREK



J. M. WAUGH



W. E. WHEELER



R. M. ZOLLINGER

The 84th Annual Session and Postgraduate Conference and Cancer Control Day

PROGRAM OF GENERAL ASSEMBLIES AND SECTIONS

WEDNESDAY MORNING

September 21, 1949

First Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: J. DUANE MILLER, M.D., Grand Rapids

Secretary: H. J. VAN BELOIS, M.D., Grand Rapids

A.M.

9:00 "Treatment of Osteomyelitis as Modified by Antibiotic and Chemotherapy"

DALLAS B. PHEMISTER, M.D., Chicago, Illinois

Professor of Surgery Emeritus, The University of Chicago; Attending Surgeon, University of Chicago Clinics.

Modern chemotherapy has brought about improvement in the treatment of pyogenic osteomyelitis as great as that which followed the introduction of antiseptic surgery. Penicillin is by far the most important of the drugs as it is effective against the microorganism in more than ninety per cent of cases. When the diagnosis of acute osteomyelitis is established early and treatment begun within twenty-four to forty-eight hours, the severe symptoms and signs usually subside rapidly and the infection may be overcome in the course of two or three weeks. Surgery is frequently unnecessary, or it may amount only to aspiration or the drainage of an abscess. In cases which respond less well or where treatment is started late, and more or less necrosis of bone has occurred, the establishment of adequate drainage should be the routine procedure. However, efficient chemotherapy for one or two months may so sterilize the dead bone that it becomes invaded and completely replaced by new bone in the course of a few months, and healing occurs without further surgery. In only a small percentage of patients who receive adequate chemotherapy, the disease advances to a chronic stage with the establishment of sequestra and cavities filled with granulation tissue or pus.

A great majority of cases of chronic osteomyelitis are seen in patients who developed the disease before the era of penicillin, or who did not receive chemotherapy until weeks after the onset. Chronic osteomyelitis does not respond to chemotherapy alone, but when treated by combination of surgery and chemotherapy the results are as spectacular as those obtained in acute osteomyelitis. The operation consists in opening the pockets and sinuses, and removal of the infected granulation tissue and dead bone, with much less necessity for effacement of pockets by the removal of living bone than was required before the use of chemotherapy. The transplantation of small fragments of bone may be indicated to fill out large pockets, or of a large onlay graft to reinforce a weakened segment of the shaft.

9:30 "Types of Diabetes Mellitus and their Management"

ARTHUR R. COLWELL, M.D., Evanston, Illinois

Associate Professor of Medicine and Director of Medical Specialty Training, Northwestern University Medical School.

Almost all diabetic problems encountered in clinical practice fall into one or the other of six classifications and can be managed accordingly. These groups and the management appropriate for each are as follows:

1. *Unproved diabetes*, usually on discovery of sugar in the urine and when no other clinical findings exist. Treatment should not be advised until suitable diagnostic procedures, especially demonstration of coexistent hyperglycemia, have been performed. Occasional harmless or innocent melliturias may be recognized by this policy.

2. *Mild diabetes*, usually in early cases or in older patients without prominent symptoms. Fully one-half of all proved diabetes is in this category. It can usually be controlled by suitable restriction of the diet without insulin, and without nutritional penalties.

3. *Moderate diabetes*, not severe but manageable by diet restriction alone. Protamine insulin in daily morn-

ing injections is most appropriate in treatment and provides good control in small or moderate dosage without difficulty.

4. *Severe diabetes*, usually in young or thin people or after long duration. It is characterized chiefly by marked symptoms, ease with which acidosis occurs, heavy glycosuria and high hyperglycemia on slight provocation, insulin-sensitivity and difficulty in obtaining good control. Mixtures of insulin and protamine insulin containing excesses of insulin, and globin insulin are most appropriate in the management of diabetes of this severity.

5. *Acute complications* in diabetes, especially acidosis, acute infection and traumatic or surgical complications. Regular insulin in multiple daily dosage, preferably at six-hour intervals, day and night, is mandatory in the management of diabetes during such acute illness.

6. *Chronic complications*, especially those of vascular or infectious origin. The accompanying diabetes is best treated according to the procedures for classes 1 to 4 above, depending on its severity. Good control is desirable but not very effective in affecting the course of the complication. The complication is then treated concomitantly as though diabetes did not exist, with great care to avoid infection and hypoglycemia in the management of vascular lesions of the extremities, heart, brain and eyes.

10:00 INTERMISSION TO VIEW EXHIBITS—Always Something New

11:00 "The Anesthesiologist is Prepared to Anesthetize the Surgical Patient, to Aid in Differential Diagnosis of Pain Paths and to Resuscitate the Patient"

JOHN S. LUNDY, M.D., Rochester, Minnesota

Head of Section on Anesthesiology, Mayo Clinic, Rochester, Minn.; Professor of Anesthesiology, The Mayo Foundation, Graduate School, University of Minnesota.

The anesthesiologist has a large variety of methods with which to anesthetize surgical patients. One of the most popular is the use of pentothal and curare plus nitrous oxide and oxygen (50 per cent each). The Magill intratracheal tube provides an excellent airway and is often used to advantage in addition to the above agents. A new three-way valve with four connections is an asset in administering pentothal separately from the curare and for the administration independently of blood or solutions of substances such as Dextran, Periston or Gelatin which support the circulating volume of the cardiovascular system. The anesthesiologist has developed tests for the estimation of the oxygen content of arterial blood, of testing the heart and the brain and blood pressure so that definite safety factors in the conduct of anesthesia are better understood now than before.

The anesthesiologist is able now to help in differential diagnosis of pain paths through his experience in doing regional anesthesia combined with the application of roentgenograms to locate the exact location of the point of the needles against bony landmarks. The use of local anesthetics may be used when the needles are not located as exactly as they must be for other substances, although Dolamin may be injected with the needle less well placed than when alcohol is to be used.

In practically all cases where block anesthesia is to be carried out on a diagnostic basis the man who makes the injection is the one individual who has an opportunity to visit with the patient prior to the injection and have an understanding beforehand and who will record the patient's tolerance for pain, the absence or presence of paresthesias of his old pain in contrast to the paresthesias that definitely are those of a new pain. The location of needles by roentgenograms is important. The injection of solution if under pressure often will or will not produce paresthesias of the old pain, depending upon what nerve is being stimulated. The irritation of the Dolamin when it is used may produce paresthesias of old or new pain. The relief of pain for hours, days or weeks decides many points in regard to the treatment which, on consultation with the internist or surgeon, may be x-ray therapy, physiotherapy, repeated injections with Dolamin, injection of alcohol, nerve section, cordotomy or even prefrontal lobotomy. Certain types of blocks have been more successful than others. Two examples are: (1) Posterior splanchnic block for pain-

PROGRAM

ful lesions and diseases of the pancreas and (2) Alcohol block of the stellate ganglia in status anginosus. The anesthesiologist in this effort acts as a consultant to the surgeon and his patient.

In resuscitating a patient the anesthesiologist is well prepared because he can produce an adequate airway with an intratracheal tube, because he can aspirate the contents of the respiratory passages and keep them free and he has oxygen available at all times. In this way he is able to adequately maintain pulmonary ventilation and avoid anoxia. Support of the circulating volume in the cardiovascular system is carried out by the use of blood or plasma where they specifically are indicated, otherwise, substances which remain in the circulation longer than other solutions are used. Dextran, Periston and Gelatin are the most popular. These substances are used in the treatment of shock and used prophylactically in an effort to avoid the appearance of shock and are useful in burned patients.

11:30 "The Diagnosis and Treatment of Cutaneous Malignancy"

EARL D. OSBORNE, M.D., Buffalo, New York

Professor of Dermatology & Syphilology, University of Buffalo School of Medicine; Founder and Secretary-Treasurer, American Academy of Dermatology and Syphilology.

The medical profession generally must improve on its early diagnosis and treatment of cutaneous malignancies. Surveys of hundreds of patients presenting themselves for examination and treatment indicate that the physician is more often at fault than the patient or his family for inadequate diagnosis and treatment. The lesions are accessible, biopsy is simple, and microscopic diagnosis is extremely accurate. Adequate sure treatment is easily available. With early diagnosis and treatment, the cure rate should be almost one hundred per cent.

In this discussion the diagnosis of the various types of cutaneous malignancy will be discussed, as well as the various methods of treatment. It will be emphasized that it is the individual skill, and not the method of treatment, that assures success. Most cutaneous malignancies can be cured by any one of a number of methods. The proper handling of nevi and potentially malignant lesions will also be discussed.

12:00 End of First Assembly

INTERMISSION TO VIEW EXHIBITS

—Program of Sections—

WEDNESDAY NOON

September 21, 1949

12:15 p.m. to 1:30 p.m.

(Subscription luncheon meetings)

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Continental Room, Pantlind Hotel

Chairman: T. H. MILLER, M.D., Detroit

Secretary: H. H. HOLMAN, M.D., Detroit

"The Treatment of Eczema Based on Etiology"

EARL D. OSBORNE, M.D., Buffalo, New York

SECTION ON ANESTHESIA

Rooms 322-324, Pantlind Hotel

Chairman: H. J. VAN BELOIS, M.D., Grand Rapids

"The Use of Dextran, Periston and Gelatin for Support of the Circulating Volume in the Cardiovascular System during Anesthesia and Operation"

JOHN S. LUNDY, M.D., Rochester, Minnesota

Certain individuals who might need support during anesthesia and operation may well be given adequate preoperative preparation by the administration of blood in order to provide the individual with as nearly as possible a normal blood count and hemoglobin reading, but whether or not the patient can be prepared ahead of time depends on whether or not the operation is an emergency. In any event one must depend upon at least a minimal blood pressure reading and a pulse rate reading within some limits of normality.

Recently, success has been achieved by the use of certain substances in maintaining circulating volume in the cardiovascular system. One of these is Dextran, a large molecule of sugar, which, when administered intravenously, stays in the circulation longer than do solutions of clear crystalloid material, plasma or the plasma of a blood transfusion. Dextran is not a substitute for a large loss of blood but it actually performs a different function than blood. It may be used in the treatment of shock or in the prophylactic treatment of shock. The quantity used and rate of injection will depend on the response in terms of blood pressure and satisfactory pulse rate. Because Dextran is a sugar it seems more attractive as a substance for intravenous use than might otherwise be the case. The actual mode of disposal of it in the body is not clear.

Periston is a solution of 3.5 per cent polyvinyl pyrrolidone in Ringer's solution and has been used many times, and it is not clear that it is harmful and it does not support the circulating volume in the cardiovascular system. Periston reduces blood pressure to shock levels in dogs and these animals seem to have a species sensitivity to the substance. It seems to be well tolerated by other animals and humans. A solution of osseous gelatin (Plasmoid) similarly supports the circulating volume. Each one of these substances is a bit different in its effectiveness. Criticisms are offered but have not been fully supported as yet.

This is an important field to the anesthesiologist and information is accumulating rapidly which should soon permit a proper evaluation of these substances.

* * *

SECTION ON UROLOGY

Room 222, Pantlind Hotel

Chairman: HAZEN L. MILLER, M.D., Royal Oak

Secretary: C. F. SCHROEDER, M.D., Detroit

"1. Trans-Midline Ureteroureterostomy

"2. Postoperative Urinary Incontinence

"3. The Clinical Application of Urecholine"

EDWIN DAVIS, M.D., Omaha, Nebraska

* * *

SECTION ON GYNECOLOGY AND OBSTETRICS

Ballroom, Pantlind Hotel

Chairman: C. N. SWANSON, M.D., Detroit

Secretary: CHARLES JARVIS, M.D., Grand Rapids

"Surgical Problems in Pregnancy"

JOSEPH L. BAER, M.D., Chicago, Illinois

A discussion of the surgical problems which arise commonly during pregnancy. The general principles governing surgery during pregnancy are discussed.

Pelvic surgery for conditions such as uterine fibroids, ovarian cysts, and genital neoplasms in general is analyzed. Abdominal conditions such as gall-bladder disease, appendicitis and intestinal pathology are considered. Surgery elsewhere is also presented.

The effect of pregnancy on these several conditions and the hazard to the pregnancy is developed.

PROGRAM

WEDNESDAY AFTERNOON

September 21, 1949

Second Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: W. S. JONES, M.D., Menominee

Secretary: E. C. LONG, M.D., Detroit

P.M.

1:30 "Pulmonary Infections with Histoplasma in Children"

WARREN E. WHEELER, M.D., Columbus, Ohio

Professor of Pediatrics, Ohio State University College of Medicine

Histoplasmosis is a fungus disease caused by *Histoplasma capsulatum*. It is recognized in man in essentially two forms. The usual form is a sub-clinical pulmonary infection which, on healing, leaves areas of calcification similar to healed lesions of tuberculosis. Healing is also accompanied by skin sensitivity to histoplasmin which is analogous to the sensitivity seen in tuberculosis. In some areas of the Middle West this type of infection is acquired by about one-half the population by the time they reach adult life. A much less common form of the disease which is seen especially in infants and children is characterized by widespread systemic involvement and has been thought to be uniformly fatal. Only recently has the survival of patients with this latter form of the disease been recognized. The author will present the clinical features of this form of the disease and will show how cultural studies and immunologic studies with some of the newer serologic tests can aid in the recognition of such cases.

2:00 "Pitfalls in Urological Diagnosis"

EDWIN DAVIS, M.D., Omaha, Nebraska

Professor, Urological Surgery, University of Nebraska College of Medicine.

It is to be recognized that in any field of human endeavor a certain percentage of error is inevitable. There are the errors of omission, the errors of commission and errors due to faulty interpretation of facts and findings, or errors in judgment. There are the amusing errors, the exasperating errors and the ghastly errors. And sometimes although ourselves responsible we are the helpless victims of errors of others. Through foresight, planning, checking, and eternal vigilance this percentage may be minimized but never eliminated.

Urological diagnosis with its instruments of precision, permitting clear visualization of the interior of the bladder and prostate gland, and methods of obtaining urine from each kidney separately, and determining with arithmetical accuracy the ability of each kidney to perform its work; also providing clear x-ray visualization of the interior as well as the exterior of each kidney has come to be almost an exact science.

Even with these extraordinary advantages, however, to say nothing of the valuable and important information to be obtained by blood studies and urinalysis, and afforded by accessibility of the prostate gland to digital palpation through the rectal wall, there remains the human element. It is to be remembered that to be human is to err, and that even an internal combustion engine has been known to make mistakes.

In that to be forewarned is to be prepared, it is therefore advisable occasionally to take stock, analyzing and considering the details of a routine, systematic, step-by-step urological investigation, and enumerating in our minds the pitfalls awaiting us at each stage, to the end that the irreducible minimum of error may be approached and that urological diagnosis may more nearly approximate the status of an exact science.

2:30 "Prolonged Labor"

JOSEPH L. BAER, M.D., Chicago, Illinois

AUGUST, 1949

Professor Emeritus, Gynecology and Obstetrics, University of Illinois (Rush); Senior Attending Gynecologist and Obstetrician, Michael Reese Hospital, Chicago.

The definition, frequency, causes and results, both treated and untreated, are discussed.

Intelligent treatment is based primarily on an accurate evaluation of the factors involved in the delay. Mechanical causes include cephalo-pelvic disproportion, certain breech presentations, deflexion attitudes, occiput posterior and transverse. Cervical dystocia and uterine inertia are analyzed. Management of the various stages of labor is considered in each of these conditions.

3:00 INTERMISSION TO VIEW EXHIBITS—

An Amazing Display

4:00 "Moles and Melanomas"

ARTHUR P. STOUT, M.D., New York City

Professor of Surgery, Columbia University.

The malignant melanomas of the skin and ectodermal mucous membranes of the mouth, nares and anal canal while uncommon are notorious for their extreme degree of malignancy and the infrequency with which they are cured. There is proof that at least half of the skin tumors originate in preexisting benign moles. It can further be demonstrated that half of the moles which become malignant have been traumatized or irritated in some way by the patient himself or a physician. Therefore the problem of what should be done about moles is of importance because while the majority of moles can be maltreated with impunity, occasionally a physician may find himself in the unpleasant position because of ignorance of having been largely responsible for the initiation of a fatal cancer. The problems dealing with which moles may become cancerous, how they should be dealt with, the danger signs in moles, the various types of malignant melanomas, their degree of malignancy, their methods of metastasis and the theories underlying their treatment will be discussed.

4:30 "Surgical Management of Malignancy of the Ampullary Region"

JOHN M. WAUGH, M.D., Rochester, Minnesota

Associate Professor of General Surgery, Mayo Foundation.

Thirty patients with carcinoma of the papilla or ampulla of Vater have undergone resection at the Mayo Clinic. Thirteen of these had a transduodenal local excision performed and these operations for the most part were carried out before the more radical procedure was available or the patients were considered too poor risks to withstand the more extensive resection. The operative mortality (46%) of transduodenal resection is higher than that for radical pancreaticoduodenectomy (12%) and since no cures were obtained, it is questionable if there is at present any justification for this less radical procedure. Choledochoduodenostomy, cholecystogastrostomy, cholecystojejunostomy, with or without gastroenterostomy, if duodenal obstruction is present or impending, will give as much palliation as local excision with less operative risk.

Seventeen radical pancreaticoduodenectomies were done for carcinoma of the papilla and ampulla of Vater with thirteen being done in one stage with one death for an operative mortality of 8%. Forty-one per cent of the seventeen are alive and well without evidence of recurrence for an average survival time of thirty-eight months. Five patients were operated on over five years ago and one did not survive the operation. Two of the remaining four (50%) are alive without recurrence, sixty-two and sixty-three months following operation. Eleven patients had radical pancreaticoduodenectomies over three years ago and four of the nine surviving operation are living without evidence of recurrence.

These studies emphasize the need for early surgical exploration of patients with unexplained jaundice with the hope that carcinoma of the papilla and ampulla may be discovered early since radical pancreaticoduodenectomy offers a reasonable chance for cure.

5:00 End of Second Assembly

5:00 Discussion Conferences in Surgery, Medicine, General Practice, Obstetrics, Pediatrics, Dermatology, and Anesthesiology.

(See page 1048.)

Twenty Discussion Conferences (Quiz Periods)

All Meetings in Pantlind Hotel and Civic Auditorium, Grand Rapids

Twenty Discussion Conferences each with a different chairman—a leader of outstanding ability in his field—will be held Wednesday, Thursday, Friday afternoons, immediately following the end of the General Assembly program for the day. Here is your chance to ask questions of the lecturers and to hear discussed medical matters of value to you in your daily practice.

WEDNESDAY, SEPTEMBER 21, 1949 5:00 to 6:00 p.m.		THURSDAY, SEPTEMBER 22, 1949 5:00 to 6:00 p.m.		FRIDAY, SEPTEMBER 23, 1949 4:30 to 5:30 p.m.	
ANESTHESIA Room 324, Pantlind Hotel Leader H. J. VanBelois, M.D. Grand Rapids Guest Conferee J. S. Lundy, M.D. Rochester, Minn.	MEDICINE Ballroom, Pantlind Hotel Leader E. D. Spalding, M.D. Detroit Guest Conferee A. R. Colwell, M.D. Evanston	MEDICINE Red Room Civic Auditorium Leader R. M. McKean, M.D. Detroit Guest Conferee E. C. Reifenstein, Jr., M.D. New York City	OTOLARYNGOLOGY Mezzanine Lounge Pantlind Hotel Leader O. B. McGillicuddy, M.D. Lansing Guest Conferee R. J. McQuiston, M.D. Indianapolis	GENERAL PRACTICE Furniture Club Pantlind Hotel Leader P. C. Gittins, M.D. Detroit Guest Conferee H. E. Bacon, M.D. Philadelphia	PEDIATRICS Red Room Civic Auditorium Leader A. L. Richardson, M.D. Detroit Guest Conferee R. L. Jackson, M.D. Iowa City
	OBSTETRICS Schubert Room Pantlind Hotel Leader C. S. Stevenson, M.D. Detroit Guest Conferee J. L. Baer, M.D. Chicago	OBSTETRICS-GYNECOLOGY Sadler Lounge Pantlind Hotel Leader N. F. Miller, M.D. Ann Arbor Guest Conferees W. J. Dieckmann, M.D. Chicago F. H. Falls, M.D. Chicago	PUBLIC HEALTH AND PREVENTIVE MEDICINE Parlors B and C Civic Auditorium Leader A. E. Heustis, M.D. Lansing Guest Conferee J. E. Gordon, M.D. Boston	MEDICINE Ballroom, Pantlind Hotel Leader W. S. Reveno, M.D. Detroit Guest Conferees W. B. Castle, M.D. Boston J. P. Peters, M.D. New Haven	RADIOLOGY Continental Room Pantlind Hotel Leader S. W. Donaldson, M.D. Ann Arbor Guest Conferee U. V. Portmann, M.D. Cleveland
	DERMATOLOGY Room 222, Pantlind Hotel Leader H. L. Keim, M.D. Detroit Guest Conferee E. D. Osborne, M.D. Buffalo	OBSTETRICS Schubert Room Pantlind Hotel Leader N. F. Miller, M.D. Ann Arbor Guest Conferees W. J. Dieckmann, M.D. Chicago F. H. Falls, M.D. Chicago	SURGERY Black and Silver Ballroom Civic Auditorium Leader F. A. Collier, M.D. Ann Arbor Guest Conferees D. B. Phenister, M.D. Chicago J. M. Waugh, M.D. Rochester, Minn.	NERVOUS AND MENTAL DISEASES Schubert Room Pantlind Hotel Leader J. M. Dorsey, M.D. Detroit Guest Conferees L. E. Himler, M.D. Ann Arbor F. G. Ebaugh, M.D. Denver	SURGERY Black and Silver Ballroom Civic Auditorium Leader H. M. Bishop, M.D. Saginaw Guest Conferees R. E. Gross, M.D. Boston Arnold S. Jackson, M.D. Madison
SURGERY Black and Silver Ballroom Civic Auditorium Leader F. A. Collier, M.D. Ann Arbor Guest Conferees D. B. Phenister, M.D. Chicago J. M. Waugh, M.D. Rochester, Minn.		OPHTHALMOLOGY Room 324, Pantlind Hotel Leader A. D. Ruedemann, M.D. Detroit Guest Conferee R. O. Rychener, M.D. Memphis	SURGERY Black and Silver Ballroom Civic Auditorium Leader G. C. Penberthy, M.D. Detroit Guest Conferees Max Thorek, M.D. Chicago R. M. Zollinger, M.D. Columbus	SYPHILOLOGY Mezzanine Lounge Pantlind Hotel Leader A. C. Curtis, M.D. Ann Arbor Guest Conferee J. E. Moore, M.D. Baltimore	

ALL MEMBERS ARE INVITED TO JOIN IN THESE QUIZ PERIODS WITH THE GUEST ESSAYISTS

PROGRAM

WEDNESDAY EVENING

September 21, 1949

General Meeting

Ballroom, Pantlind Hotel

President: E. F. SLADEK, M.D., Traverse City
 Secretary: L. FERNALD FOSTER, M.D., Bay City

P.M.

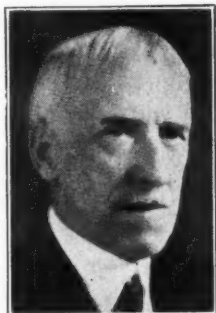
8:30

Officers' Night—Public Meeting

1. Call to order, and announcements and reports of the House of Delegates, by L. Fernald Foster, M.D.
2. Introduction of President E. F. Sladek, M.D., followed by President's Annual Address.
3. Introduction of President-Elect W. E. Barstow, M.D., St. Louis, and induction of Dr. Barstow into office of President of the Michigan State Medical Society by the Retiring President.
Response of Dr. Barstow.
4. Introduction of the new President-Elect and other recently elected Officers and of the Chairman of The Council, O. O. Beck, M.D., Birmingham.
5. Presentation of scroll and Past President's Key to Dr. Sladek by the Chairman of The Council, Dr. Beck.
6. Induction of members into the MSMS "Fifty-Year Club" by Retiring President E. F. Sladek, M.D.

9:15

7. The Andrew P. Biddle Lecture.
"Observations on Medicine and Surgery in Europe" (30 minutes)
HERBERT ACUFF, M.D., Knoxville, Tennessee.
President-Elect International College of Surgeons
8. Presentation of Biddle Lecture scroll.



ANDREW P. BIDDLE, M.D.
 Patron of Postgraduate
 Medical Education
 (Deceased August 2, 1944)

10:30 Reception by Woman's Auxiliary, Furniture Club.

August, 1949

THURSDAY MORNING

September 22, 1949

Third Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: E. A. OSIUS, M.D., Detroit
 Secretary: C. N. SWANSON, M.D., Detroit

A.M.

9:00

"Early Diagnosis of Carcinoma of the Uterus"
 FREDERICK H. FALLS, M.D., Chicago, Illinois

Professor of Obstetrics and Gynecology, College of Medicine, University of Illinois.

The early diagnosis of carcinoma will only be possible when the general practitioners of this country become sufficiently conscious of their responsibility in this direction. The primary requisite is an understanding of the way in which carcinoma develops in the uterus. We must in certain respects un-learn the information regarding the early signs of carcinoma and realize when bleeding and foul smelling discharge appears that we are dealing with a relatively advanced carcinoma of the uterus.

It is also important for us to remember that carcinoma occurs at all ages, not only at the sixth and seventh decades, and that relatively simple tests and procedures applied at the proper time will lead to the detection of early malignant lesions. The Papanicolaou smear, the endometrial biopsy, the Schiller test, the Clark test, the curettage and excision of tissue from suspicious areas on the cervix all have their place in helping to make accurate diagnoses.

One of the most important advances in recent years has been the detection of intraepithelial carcinoma by the examination of biopsies from the cervix of women who have had no signs or symptoms of carcinoma. An appreciation of this possibility can only be acquired through studies of microscopic preparations removed from non-cancerous appearing cervixes.

9:30

"Deep Infections of the Neck"

RALPH J. MCQUISTON, M.D., Indianapolis, Indiana

Hospital Staffs of Indianapolis University Medical Center, Methodist Hospital, Indianapolis General Hospital, St. Vincent Hospital and St. Francis Hospital.

Deep infections of the neck are considered as serious complications of the ear, nose, throat and mouth diseases. These infections usually have their origin in the teeth, salivary glands, pharynx, tonsils, sinuses, vertebrae, temporal bone, or deeply seated retropharyngeal or lateral lymph glands. When these infections descend into the neck they usually follow rather definite pathways which are defined by the fascial planes of the neck. The deep cervical fascia covers and encloses all the structures of the neck such as the muscles, blood vessels, salivary glands, lymph glands, thyroid, and so forth, holding them in their allotted spaces from the base of the skull to the clavicle. By this function many potential spaces are formed which greatly influence the course that suppurations take when they invade these regions.

Infections which occur in the submaxillary, masticator, pharyngomaxillary, pterygomaxillary, parotid, and retropharyngeal spaces will be discussed as to their etiology, anatomical course, and general clinical picture.

The most common complications of deep neck infections are septicemia, asphyxia and massive hemorrhage. These conditions present a serious situation which immediately threaten the life of the patient. The etiology and management of these complications will be presented.

The medical and surgical management of these virulent types of neck infections will be considered. Chemotherapy, in recent years, has greatly influenced the course of these infections; however, it does not supplant surgery, and if suppuration has taken place it should be surgically drained. To procrastinate beyond a reasonable stage, and to depend upon drug therapy, is only to invite a more serious complication.

10:00

INTERMISSION TO VIEW EXHIBITS—
 Something To Interest You

1049

PROGRAM

11:00 "Effect of Prenatal Factors on Survival of Newborn Infants"

HERBERT C. MILLER, M.D., Kansas City, Kansas

Professor and Head of Department of Pediatrics, University of Kansas School of Medicine.

Approximately half the deaths in newborn infants can be accounted for by factors that were operating during pregnancy and which had nothing to do with the labor or delivery. Many of the defects and injuries seen in infants who survive the newborn period were caused by prenatal factors. Seventy to eighty per cent of the severe degrees of mental deficiency seen in older children can be related to events that transpired before birth.

While genetic factors account for a large number of these deaths and defects, there is an imposing and growing list of environmental factors which are now known to be capable of causing disease in the fetus, resulting in death or serious injury. The known factors are maternal infection, including German measles, toxoplasmosis and syphilis, a poor maternal diet, sensitization of the mother to Rh, A and B antigens, diabetes mellitus, the pre-diabetic state and irradiation of the maternal pelvic region early in pregnancy.

11:30 "A New Principle in the Control of Communicable Diseases"

JOHN E. GORDON, M.D., Boston, Massachusetts

Professor of Preventive Medicine and Epidemiology, Harvard School of Public Health.

12:00 End of Third Assembly

INTERMISSION TO VIEW EXHIBITS

—Program of Sections—

THURSDAY NOON

September 22, 1949

12:15 p.m. to 1:30 p.m.
(Subscription luncheon meetings)

SECTION ON PEDIATRICS

Continental Room, Pantlind Hotel

Chairman: R. H. TRIMBY, M.D., Lansing

Secretary: E. H. WATSON, M.D., Ann Arbor

"Pulmonary Disease in Newborn Infants"

HERBERT C. MILLER, M.D., Kansas City, Kansas

Hyaline-like membranes lining the terminal air spaces in the lungs are seen in almost half of all the autopsies done on newborn infants. It was previously thought that these membranes were the result of aspiration of amniotic fluid and vernix. Evidence is now available to show that this theory is unlikely. The hyaline-like membranes probably are the result of some injury to the lung which occurs in utero and very likely leads to the premature birth of the infant. These membranes are found in 25 per cent of all infants whose birth weights range from 1000 to 1500 grams. The incidence diminishes in the heavier birth weight groups to the extent that it is not seen in infants who weigh over 3000 grams. It is rare to find hyaline-like material in the lungs in stillborn infants and then only in small amounts.

The presence of hyaline-like material in the lung probably accounts for more deaths among premature infants than any other single factor.

The nature of the etiological agent that produces these membranes is unknown. In older individuals membranes of a similar appearance are found in the lungs of persons dying as the result of acute pneumonias of coccal origin, rheumatic pneumonia, pandemic influenza and radiation pneumonitis. These membranes have also been found in dogs subjected to phosgene gas and cadmium chloride aerosols.

SECTION ON SURGERY

Ballroom, Pantlind Hotel

Chairman: D. B. HAGERMAN, M.D., Grand Rapids

Secretary: H. K. RANSOM, M.D., Ann Arbor

"Lumbar Hernia"

MAX THOREK, M.D., Chicago, Illinois

An analysis of reported cases of lumbar hernia is presented, and the rarity of the condition pointed out. Anatomic considerations of lumbar hernia in Petit's and Grynfeltt-Lesshaft's triangles are discussed. The varieties of lumbar hernia and the methods of surgical relief are presented. While in well-developed cases a diagnosis is made with facility, in early cases and in obese individuals diagnosis is often difficult. The symptomatology and differential diagnosis are discussed. Two cases from the author's experience are presented by motion pictures and slides.

* * *

SECTION ON OTOLARYNGOLOGY

Schubert Room, Pantlind Hotel

Chairman: W. K. SLACK, M.D., Saginaw

Secretary: J. E. CROUSHORE, M.D., Detroit

"Endaural Radical Mastoidectomy for Chronic Mastoiditis"

RALPH J. MCQUISTON, M.D., Indianapolis, Indiana

When the otologist is consulted by a patient with a chronically discharging ear, it is his duty to evaluate the pathology and to recommend treatment. In some cases of continued aural discharge, the pathology present may be of no danger to the patient's life. In other cases are found extremely dangerous situations only awaiting acute exacerbations, which may lead to serious intracranial complications which would threaten the life of the patient. The patient, however, is primarily interested in a cure for his chronic discharging ear and is totally unaware of any serious complication which may befall him. It is the doctor's responsibility to effect a cure of the complaint and also to eliminate the potential danger to life.

From his past experience in radical mastoid surgery, the surgeon may be reluctant to promise the patient a cure for his chronic discharging ear; however, he may stress his ability to prevent an intracranial complication in advising surgery.

Since the development of the fenestration technique and its application to radical mastoid surgery, our chances of effecting a cure of the chronic aural supuration has been greatly improved. With the end aural approach, using the motor driven burr and working under magnification, the surgeon is able to identify vital structures and remove pathology which in the past he would have allowed to remain.

In the presentation of this technique, types of end aural incisions, important bony landmarks, approach to the mastoid antrum, visualization of vital structures, and application of skin grafts in radical mastoid surgery will be discussed.

* * *

SECTION ON OPHTHALMOLOGY

Room 222, Pantlind Hotel

Chairman: DON MARSHALL, M.D., Kalamazoo

Secretary: J. C. GEMEROY, M.D., Detroit

"Ocular Allergies"

RALPH O. RYCHENER, M.D., Memphis, Tenn.

The ocular allergies include contact dermatitis and keratoconjunctivitis, vernal conjunctivitis, phlyctenular keratoconjunctivitis, and migraine. The first three groups will be profusely demonstrated by kodachrome slides and some pertinent remarks made with respect to treatment of all four groups.

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SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE

Sadler Lounge, Pantlind Hotel

Chairman: B. H. DOUGLAS, M.D., Detroit

Secretary: O. K. ENGELKE, M.D., Ann Arbor

"Epidemiology—Old and New"

JOHN E. GORDON, M.D., Boston, Massachusetts

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PROGRAM

THURSDAY AFTERNOON

September 22, 1949

Fourth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: R. C. POCHERT, M.D., Owosso

Secretary: DON MARSHALL, M.D., Kalamazoo

P.M.

1:30 "Indications for Surgery in Gall-bladder Disease"

ROBERT M. ZOLLINGER, M.D., Columbus, Ohio

Professor and Chairman of the Department of Surgery of the Ohio State University College of Medicine and Chief of the Surgical Service of the University Hospitals of the Ohio State University.

Despite the ever-improving morbidity and mortality rates in biliary surgery, the physician too frequently advises against surgery except in the presence of serious complications. In part, this attitude emanates from follow-up reports of unsatisfactory results in former years. If the chief indication for surgery is based only on evidence of poor filling, delayed emptying, or unusual size or shape of the gall bladder in the cholecystogram, the results are often disappointing.

Good results are to be expected if approximately 95 per cent of the gall bladders removed contain stones. Many small stones are potentially more troublesome than a solitary large calculus.

The removal of a diseased gall bladder is usually advisable in the presence of such coexistent disorders as peptic ulcer, pancreatitis, or heart disease. These associated diseases do not alter the surgical indications in recurrent biliary colic, common duct stone, or acute cholecystitis, and indeed make surgery all the more imperative. Early hospitalization is urged when the diagnosis of acute cholecystitis is made in order to permit surgical intervention at the optimum time.

Approximately 40 per cent of patients undergoing cholecystectomy will require common duct exploration in order to ensure complete removal of all stones which have escaped into the bile ducts. The incidence of common duct stones recovered upon exploration should approximate 20 per cent of all cases.

The physician should weigh the risk of surgery in the early stages when the diseased gall bladder or gallstones is first discovered against a possible higher mortality rate from complications occurring in later years. He should review all aspects of his management of gall bladder disease from time to time to determine if his methods assure the lowest possible mortality and morbidity. In a population of increasing longevity, the principle of prophylactic surgery in patients with low-grade symptoms is assuming a place of greater importance because of the likelihood of serious complications from biliary tract disease in the elderly.

2:00 "Use of Steroid Hormones in Bone Disease of Aging People"

EDWARD C. REIFENSTEIN, JR., M.D., New York City

Clinical Endocrinologist, Sloan-Kettering Institute; Clinical Research Consultant, Ayerst, McKenna & Harrison.

Normal adult bone is continuously being formed and being resorbed at constant equal rates. During the process of aging, the rate of bone formation decreases, and since bone resorption continues unabated, the bones become thin. This atrophy of bone is called osteoporosis.

Many factors are of importance in the etiology of this condition, including particularly changes in physical activity and alterations in gonadal hormone production. Some degree of osteoporosis is practically physiological in women after a physiological menopause. For reasons still unknown, certain women exhibit a more marked degree of decrease in bone formation, so that about five years after the change of life clinical manifestations appear. Osteoporosis of a clinical degree is the commonest of all metabolic osteopathies. The condition is more severe after an artificial than after a physiological menopause.

The bones involved in order of predilection are the vertebral column and pelvis, the shafts of the long bones, and the skull. Fracture of the vertebra with collapse, wedging, or herniation of the nucleus pulposus is very common. By x-ray the bones appear less dense than normal rather than smaller. The changes in the bones by x-ray are not pathognomonic of osteoporosis, however, and do occur with the other conditions with too little calcified bone (osteomalacia and osteitis fibrosa generalisata).

Osteoporosis is usually easily diagnosed by the combination of thin bones and normal blood chemistry (calcium, inorganic phosphorus, and alkaline phosphatase). Infrequently a similar picture is produced by multiple myeloma.

The important factors in the treatment of osteoporosis include a high protein diet, an adequate intake of water, an avoidance of excessive intake of calcium and vitamin D, elimination of all unnecessary immobilization, and the administration of gonadal hormones. By metabolic studies it can be shown that both estrogen and androgen cause retention of calcium and phosphorus in the proportions that exist in bone, and that the greatest retention occurs from the combination of estrogen and androgen together. Clinically dramatic improvement occurs in the bone pain and other symptoms after a few weeks of therapy. The most satisfactory results are obtained when therapy is continued for long periods of time (over five years).

2:30 "Glaucoma in General Practice"

RALPH O. RYCHENER, M.D., Memphis, Tennessee

Associate Professor of Ophthalmology, University of Tennessee.

Glaucoma, the cause for more than 30 per cent of the blindness in this nation, is usually considered as chronic simple glaucoma for which the general practitioner as well as the ophthalmologist must be constantly on the alert. Complaints of morning headaches, transient blurring of vision, and halos about lights are suspicious symptoms for which patients must be thoroughly investigated.

However, there are three forms of glaucoma which are usually seen first by the general practitioner, are often misdiagnosed and neglected, and being in the nature of emergencies, thereby are seen by the ophthalmologist too late to save or restore sight. These are congenital glaucoma, secondary glaucoma incident to traumatic hyphemia, and acute glaucoma. The nature of these groups will be elaborated with respect to differential diagnosis and illustrated by kodachrome slides.

3:00 INTERMISSION TO VIEW EXHIBITS—Your Friends Await You

4:00 "Indications and Methods for Terminating Pregnancy in the Last Trimester"

WILLIAM J. DIECKMANN, M.D., Chicago, Illinois

Mary Campbell Ryerson Professor, University of Chicago, Department of Obstetrics and Gynecology; Chief of Service Chicago Lying-In Hospital; Attending Gynecologist, Albert Merritt Billings Memorial Hospital.

Labor is not induced because of post-maturity, borderline pelvic contraction, large baby or for mutual convenience of doctor and patient. There is a very definite risk for both mother and baby in this procedure.

Induction of labor is practiced in the following cases: *Partial Placenta Previa and Low-lying Placenta*—If there is one or more centimeters dilatation of the cervix, rupture of the membranes, with or without traction by a Willett forceps, may control the bleeding. If labor does not begin in six to eight hours or earlier; in selected cases, fractional doses of pitocin or solution of posterior pituitary beginning with 1/2 minim and increasing every thirty minutes up to a maximum dose of 3 minims may be used for a total of 1 ml.

Abruptio Placenta—If there is any dilatation, rupture the membranes and permit all of the amniotic fluid to escape. Blood transfusions and other parenteral fluids should be given during this period. If at the end of four to eight hours the uterus has increased in size or there has been further internal hemorrhage as evidenced by the patient's clinical condition, a low cervical cesarean section may be performed.

Toxemia—This is a general term covering patients with pre-eclampsia-eclampsia, essential hypertension, etc. The best treatment for toxemia irrespective of the etiology, is termination of the pregnancy. However, conditions must be such that mother and preferably baby also should survive. In general, it is best if the case is not too severe, to use medical management in the hospital until the cervix is ripe; meaning in the primipara, an effaced, softened cervix varying in thickness from 5 to 10 millimeters with 1 or more centimeters dilatation and in the multipara, a cervix which is dilated 2 or more centimeters and is soft.

Miscellaneous—Patients with compensated heart disease, pyelonephritis and other complications may have labor induced at the optimum time by rupture of the membranes when the cervix is ripe.

The technique is to strip the membranes about the

PROGRAM

cervix as far as one can reach and then rupture them, permitting as much amniotic fluid to escape as possible. In some instances, where the head is very high, it is advisable to give a small dose of pitocin or pituitary fifteen minutes before the membranes are ruptured.

Vaginal Hysterotomy is an operation that is rarely used.

Dührssen's Incisions—This procedure for patients who are dilated less than 6 centimeters is an admission of a misjudgment. Dührssen's incisions with 7 or more centimeters dilation and the head engaged, is a valuable procedure providing the obstetrician is familiar with the technique. It is better than waiting for the cervix to tear, which it will do in most instances. Properly carried out Dührssen's incisions result in less maternal and fetal morbidity and less fetal mortality.

Cesarean Section—Doctors should be criticized severely for not performing an indicated section while the case is still a clean one and the baby is undamaged. The maternal mortality for elective cesarean section should be less than 0.2 per cent and the gross mortality for all types of sections should be less than 1 and in many instances should be less than a half per cent. The fetal mortality in elective cesarean sections should be less than 2 per cent and for all types of cesarean sections should be less than 6 per cent. Cesarean section must not be used as a procedure of last resort. It should be an elective procedure if tumors are blocking the pelvis, if there is marked disproportion, in many cases of placenta previa, some cases of abruptio placenta, selected cases of toxemia, and for certain abnormal presentations and positions. It should be carried out after proper tests of labor, if there is borderline disproportion, or if there is a faulty mechanism of labor.

Cesarean Hysterectomy—In this operation all of the uterus, including the cervix or at the most leaving 1 to 2 centimeters of cervix in the infected patient, has its place in obstetrics. It is a simple procedure if one becomes familiar with the technique. In our opinion, it is the safest operation where there is actual or potential intra-uterine infection. The mortality should be less than 1 per cent. We do not believe that anaerobic organisms causing most cases of puerperal infection in clean hospitals respond to any of the antibacterial agents.

The fetal mortality for all types of obstetric delivery must not be neglected. There is an irreducible fetal mortality with all obstetric complications. It should be kept as low as possible. The fetal mortality in our hospitals has been decreasing every year and the still-birth and neonatal uncorrected fetal mortality for fetuses weighing 1000 grams or more is less than 2.5 per cent.

4:30 "Impending Death Under Anesthesia"

MAX THOREK, M.D., Chicago, Illinois

Professor of Surgery, Cook County Graduate School of Medicine; Surgeon in Chief, American Hospital of Chicago; formerly Attending Surgeon, Cook County Hospital; Founder and General Secretary of the International College of Surgeons.

Cardiac arrest, fortunately, is one of the rare complications of the administration of spinal anesthesia.

The constantly increasing employment of spinal anesthesia makes it imperative for all those who operate when it is being used to prepare to deal with this gravest of all complications, should it arise. An emergency outfit should be always at hand, and a prior rehearsal of the entire operating team to make each member thoroughly familiar with his part in preventing a fatal outcome, is imperative.

When the abdominal or thoracic cavities have already been opened, the surgeon can reach the heart directly, but if no such opening exists he is justified in opening the abdomen or thorax at once, and beginning cardiac massage without an instant's delay, as speed is the indispensable requisite of any procedure dealing with cardiac arrest.

Three methods of cardiac massage are described: standard method, the method of Nicholson, and the intercostal approach of Lampson. The third method is useful in ventricular fibrillation, when complete cardiac arrest has not occurred.

Methods of suspension of heart and respiratory action are discussed.

A motion picture of one of the author's cases is presented.

5:00 End of Fourth Assembly

5:00 Discussion Conference in Surgery, Medicine, Otolaryngology, Gynecology and Obstetrics, Ophthalmology, Public Health and Preventive Medicine

(See Page 1048)

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THURSDAY EVENING

September 22, 1949

STATE SOCIETY NIGHT

Ballroom, Pantlind Hotel

10:30 An evening of entertainment for all registrants, their ladies and guests.

Cabaret-style Dance and Floor Show.

Host: Michigan State Medical Society.

(Admission by card furnished to all upon registration)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

FRIDAY MORNING

September 23, 1949

Fifth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: L. C. HARVIE, M.D., Saginaw

Secretary: R. H. TRIMBY, M.D., Lansing

A.M.

9:00 "Basic Principles in the Treatment of Blood Dyscrasias"

WILLIAM B. CASTLE, M.D., Boston, Massachusetts

Professor of Medicine and Chairman of Department of Medicine, Harvard Medical School.

The remarkable advances in the treatment of some types of anemia provide a striking contrast to the vexing or as yet insoluble problems of therapy of other blood dyscrasias. Therefore, the assets and liabilities of existing methods need to be clearly understood. There are five general methods of treatment of varying effectiveness and permanence: (1) Substitution therapy for anemias of nutritional or of endocrine deficiency; (2) Chemotherapy of infection causing anemia or resulting from agranulocytosis, and of leukemia and lymphoma; (3) Splenectomy, in hemolytic anemias and purpura; (4) Irradiation in polycythemia and leukemia; finally, (5) Transfusion, both as a form of therapy in its own right and as a useful accessory to other forms of treatment.

Pernicious anemia responds to liver extract or to Vitamin B₁₂ produced by microbial synthesis. Hypochromic anemia responds to orally administered ferrous iron. Thyroid extract is necessary for the complete return to normal of the blood of patients with hypothyroidism. Chemotherapy, particularly with penicillin, is the most effective treatment of infections secondary to agranulocytosis by allowing time for spontaneous recovery of the bone marrow. When anemia is due to malaria or to endocarditis, eradication of the infection is the primary requirement. Modern palliatives with effects resembling those of arsenic in the treatment of leukemia and lymphoma are the so-called nitrogen mustards, urethane, and in leukemia especially in children, analogs of folic acid. Splenectomy, long known to be effective in congenital hemolytic jaundice, is now recognized frequently to be useful in the acquired form of this disease and in instances of chronic leukopenia. It is the only effective, though by no means universally successful, treatment for the generalized bleeding tendency due to deficient platelets in the blood. Sometimes splenectomy or modern operations joining the portal and systemic veins in the abdomen may relieve the pressure in the veins of the esophagus that leads to recurrent and sometimes fatal hemorrhage. Irradiation in the form of x-ray, long known to be useful in the treatment of polycythemia, leukemia, and lymphoma, can now be given by the use of radio-active isotopes, particularly of phosphorus. These compounds supply a form of internal irradiation to all rapidly growing cells of the body. Unfortunately, for this

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reason their action is not very selective, but in those chronic forms of leukemia in which x-ray is effective, radio-active phosphorus may be a more convenient way of supplying the same effect. X-ray, however, possesses the great advantage in the treatment of lymphoma that it can be given locally in high intensity to lymphoid enlargements when these press on vital structures. Transfusion is valuable whenever the hemoglobin cannot be raised by other means, whether as a preparation for operation or a means of keeping a patient an ambulatory and useful member of society. Transfusion may also be effective in controlling hemorrhage due to deficiency of blood platelets. In hemophilia, repeated transfusions of fresh blood remain the best form of emergency treatment for severe bleeding despite the development of blood fractions possessing anti-hemophilic effects. Replacement transfusions are of life-saving from sensitization treatment of infants at birth suffering from sensitization to the Rh factor. The development of the blood bank has made available to the patient the right type of blood in adequate amounts in a way never before possible.

9:30 "Recent Advances in the Study of Venereal Diseases"

JOSEPH E. MOORE, M.D., Baltimore, Maryland

Associate Professor of Medicine and Adjunct Professor of Public Health, Johns Hopkins Hospital, Baltimore, Maryland.

This communication is a report of recent American advances in venereal disease research. Included is a discussion of the use of oral penicillin in the prophylaxis of gonorrhea; the multiplication time of the *Treponema pallidum* in vivo; the cultivation of *T. pallidum* in artificial media; the recent discovery of treponemocidal antibody distinct from reagin; the use of penicillin in the treatment of syphilis, with especial reference to procaine penicillin; the prophylactic (early abortive) treatment of syphilis; failure rates in early syphilis and their relation to serologic pattern; prenatal syphilis; the necessity for retreatment of syphilitic pregnant women in every pregnancy; the Jarisch Herxheimer reaction; the dynamics of penicillin action; new antibiotics.

10:00 INTERMISSION TO VIEW EXHIBITS— They Close at 3:30 p.m. TODAY

11:00 "The Diagnosis and Treatment of Common Diseases of the Anorectum"

HARRY E. BACON, M.D., Philadelphia, Pennsylvania

Professor and Head of Department of Proctology, Temple University Medical School and Hospital; Head of Department, St. Mary's Hospital.

Diagnosis and treatment of common diseases of the anorectum and discussion with particular mention of fissure, hemorrhoids, prolapse, pruritus ani and cancer.

11:30 "Iatrogenicity in Medicine"

FRANKLIN G. EBAUGH, M.D., Denver, Colorado

Professor of Psychiatry, Head of Department, University of Colorado Medical Center.

Iatrogenic illnesses are those disorders induced in the patient by the physician, based on the physician's examination, manner and discussion. Until recently medical investigation and education adhered to a mechanistic methodology which precluded recognition of the importance of emotional factors in the genesis and course of disease.

This educational hiatus is usually manifested among the medical profession in three areas:

1. Failure to recognize the existence of emotional factors in illness. This failure typically results in extended and costly organ investigations which frequently "calcify" existing emotional disturbance, depletes the patient financially, terminates with a feeling of bitterness toward legitimate medicine and the seeking of surcease among quacks.

2. Inability to treat minor emotional disorders if recognized. The situation is provocative of anxiety and/or hostility in both the doctor and patient and usually ends in rejection of the patient by the doctor with accentuation rather than alleviation of the patient's illness.

3. A lack of awareness of the functional importance of the doctor's feelings, attitudes, and behavior in the treatment of disease. The doctor's anxiety, hostility, and need of personal gratification frequently plays a role of tremendous importance in the course of a patient's illness.

Lack of awareness and functional understanding of these basic phenomena not only deprives the doctor of an essential therapeutic orientation but frequently incites and perpetuates illness. One-third of all illness is emo-

tionally determined. An additional third of patients have significant emotional duress coexistent with organ pathology. A psychiatrist cannot be a good doctor without a basic understanding of medicine. A doctor cannot practice good medicine without a working knowledge of the role emotion plays in the cause and cure of disease.

12:00 End of Fifth Assembly

INTERMISSION TO VIEW EXHIBITS

—Program of Sections—

FRIDAY NOON

September 23, 1949

12:15 p.m. to 1:30 p.m.

(Subscription luncheon meetings)

SECTION ON MEDICINE

Ballroom, Pantlind Hotel

Chairman: C. B. BEEMAN, M.D., Grand Rapids

Secretary: G. C. THOSTESON, M.D., Detroit

"The Causes and Instance of Salt Deficiency"

JOHN P. PETERS, M.D., New Haven, Connecticut

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SECTION ON GENERAL PRACTICE

Furniture Club, Pantlind Hotel

Chairman: E. C. LONG, M.D., Detroit

Secretary: J. F. FAILING, M.D., Grand Rapids

"Newer Trends in the Management of Large Bowel Surgery"

HARRY E. BACON, M.D., Philadelphia, Pennsylvania

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SECTION ON NERVOUS AND MENTAL DISEASES

Schubert Room, Pantlind Hotel

Chairman: F. P. CURRIER, M.D., Grand Rapids

Secretary: R. P. SHEETS, M.D., Traverse City

"The Place of Psychiatry in Industry"

LEONARD E. HIMLER, M.D., Ann Arbor, Michigan

Associate Professor of Mental Health, School of Public Health, University of Michigan; Medical Director, Mercywood Hospital, Ann Arbor, Mich.

Industrial psychiatry is concerned with the application of the principles and certain specific techniques of psychiatry and mental hygiene to the field of industrial medicine, personnel work, and management. Although this specialty is new and still in its formative stage, it has distinct contributions to make in respect to both the clinical and the preventive aspects of industrial medical practice. The psychiatrically oriented physician will make more accurate personality evaluations in the course of the preplacement examination, and more effectively treat neuropsychiatric disorders as they occur in industry. He is more capable in the handling of emotionally handicapped individuals, and in the application of direct psychotherapy where it is required in industrial practice.

PROGRAM

Preventive functions involve numerous educational and advisory activities in which the physician shares with other personnel the responsibility for accident prevention, supervisory training, improvement in the quality and quantity of counseling throughout the organization, the handling of "problem employees," and a review of the emotional components in labor relations policies, union negotiations, and grievance procedures.

SECTION ON RADIOLOGY

Continental Room, Pantlind Hotel

Secretary: J. E. LOFSTROM, M.D., Detroit

"Contact Roentgen Therapy for Superficial Lesions"

URSUS V. PORTMANN, M.D., Cleveland, Ohio

Contact Roentgen Therapy apparatus was developed by Chaoul as a substitute for radium therapy to accessible pathologic conditions. It has certain advantages over radium therapy or other methods of giving roentgen therapy for superficial lesions: (1) the voltage is low therefore depth dose minimal; (2) the roentgen ray output high because of the construction of the tube with anode close to the end, therefore treatment time very short; (3) the radiation can be accurately localized and limited with special cones; (4) it obviates the hazards of handling radium.

The discussion will be based upon Kodachrome slides showing patients before and after treatment. These will include hemangiomas, epitheliomas, verruca vulgaris and plantaris, and similar superficial lesions. Most of the conditions shown would be difficult to treat by other methods.

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FRIDAY AFTERNOON

September 23, 1949

Sixth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: C. A. PAUKSTIS, M.D., Ludington

Secretary: C. B. BEEMAN, M.D., Grand Rapids
P.M.

1:30 "Acute Surgical Abdomen"

ARNOLD S. JACKSON, M.D., Madison, Wisconsin
President, American Goiter Association; Secretary, International College of Surgeons, United States Chapter.

A brief review of medical diseases that may closely simulate acute surgical lesions of the abdomen is given. Important differential diagnostic points are discussed. A résumé of the important acute surgical lesions of the abdomen is presented, among them being: perforating ulcer, cholecystitis, pancreatitis, obstruction, traumatic, congenital, thrombosis, appendicitis, enteritis, etc. The characteristic diagnostic points are summarized and the pre- and postoperative care is stressed. The important factors in the surgical treatment of these conditions are emphasized. Special attention is given to the role of antibiotics in conjunction with surgery of the acute abdomen and particularly in the treatment of peritonitis.

2:00 "Importance of Breast Feeding"

ROBERT L. JACKSON, M.D., Iowa City, Iowa
Associate Professor, Department of Pediatrics, State University of Iowa.

Artificial feeding of infants has become so easy and successful that the importance of breast feeding is underestimated and needs to be restressed. In recent years physicians, as well as other groups of persons, have begun to question the advantages of breast feeding. There are fewer deaths and illnesses among those babies breast fed than among those artificially fed.

The lower mortality and morbidity rates in breast-fed infants are the results of multiple factors. The danger of bacterial contamination of the milk is practically eliminated. Human errors in prescribing and preparing formulas are avoided. Breast-fed infants are more resistant to infections. Resistance to infection is related to the amount and quality of protein in the diet. The protein content of the mother's milk during the early weeks of lactation is especially good and beneficial for the newborn.

Another advantage of human milk is its higher nutritional value. Milk from a healthy mother who is eating a good diet meets all the nutritional needs of her child with the exception of iron and vitamin D. Breast feeding proves more convenient and economical for many families. One of the most common allergens causing infantile eczema is cow's milk. The involuntary processes in the mother after termination of pregnancy occur earlier if the mother is nursing her infant. The security and affection automatically given with breast feeding is important in establishing a good relationship between the mother and her infant.

In our country the majority of babies today are born in hospitals where rigid feeding schedules are followed and where the babies are segregated from their mothers. Newer trends in pediatrics show marked preference for less rigid feeding schedules and more freedom in early mother-infant companionship.

2:30 "Cancer of the Breast"

URSUS V. PORTMANN, M.D., Cleveland, Ohio
Director of Therapeutic Radiology, Cleveland Clinic.

In this country cancer of the breast occurs more than twice as frequently as cancer in any other location in either sex. The general average of curability is not as high as might be expected of cancer which is located so near the surface. The principal reason for this is that treatment is delayed too long after patients become aware of the first symptoms or signs. It has been found that the reason for delay in over 60 per cent of cases has been attributable to the patient. Some are unobservant about their anatomy, others are ignorant of the significance of the discovery of a lump in their breasts or other symptoms and not a few fear that they have cancer and therefore procrastinate.

In addition to the delay in proper treatment for which patients are responsible, in about 25 per cent bad advice by the physician consulted at the first sign—usually a lump in the breast—is at fault. Such patients are reassured when their doctors give placebos and tell them their symptoms are not serious. This trouble may be because the textbook signs of frank cancer are not present or recognized and the significance of the patient's symptoms disregarded.

Although surgical procedures have been employed for centuries in the treatment of cancer of the breast they have limitations. The principal limitation is the amount of tissue that can be removed by radical mastectomy. In many cases the disease has progressed beyond these limitations and complete removal is impossible.

During the past half century it has been found that cancer cells may be destroyed or their growth inhibited by roentgen ray and radium therapy. However these methods of treatment also have physical and biological limitations. Therefore because of the limitations of both surgical and radiological procedures many patients with cancer of the breast cannot be cured.

There are certain clinical signs of incurable cancer of the breast. These will be presented and discussed in their relationship to the indications and limitations of different methods of treatment.

*From the Cleveland Clinic Foundation and the Frank E. Bunts Institute, Cleveland, Ohio.

3:00 INTERMISSION TO VIEW EXHIBITS—Your Last Opportunity

3:30 "The Surgical Treatment for Coarctation of the Aorta"

ROBERT E. GROSS, M.D., Boston, Massachusetts
Ladd Professor of Children's Surgery, Harvard Medical School, Boston, Mass.; Surgeon-in-Chief, The Children's Hospital, Boston.

4:00 "Causes and Treatment of Lower Nephron Nephrosis"

JOHN P. PETERS, M.D., New Haven, Connecticut

John Slade Ely Professor of Medicine, Yale University School of Medicine; Attending Physician, New Haven Hospital; Consulting Physician, Norwalk and Stamford Hospitals.

4:30 End of General Assembly

4:30 Discussion Conferences in Surgery, Medicine, General Practice, Radiology, Pediatrics, Nervous and Mental Diseases, Syphilology, and Pathology.

(See page 1054)

5:30 END OF SCIENTIFIC ASSEMBLY AND OF 1949 ANNUAL SESSION

PROGRAM

CANCER CONTROL DAY SATURDAY, SEPTEMBER 24, 1949

Ballroom, Pantlind Hotel

Sponsored by the MSMS Cancer Control Committee, the American Cancer Society, Michigan Division, Inc., and the Michigan Foundation for Medical and Health Education, Inc.

PROGRAM

- A.M.
- 9:05 "Psychiatric Management of the Cancer Patient"
FRANKLIN G. EBAUGH, M.D., Denver, Colorado
- 9:25 "The Indications and Limitations of X-ray and Radium Treatment for Cancer"
URSUS V. PORTMANN, M.D., Cleveland, Ohio
- 9:45 "The Diagnosis and Management of the Leukemias"
WILLIAM B. CASTLE, M.D., Boston, Mass.
- 10:15 "Cancer of the Thyroid"
ARNOLD S. JACKSON, M.D., Madison, Wisconsin
- 10:40 "Embryomas of the Kidney in Childhood"
ROBERT E. GROSS, M.D., Boston, Massachusetts
- 11:10 to 12:00 Questions and General Round Table Discussion
Moderator: NORMAN F. MILLER, M.D., Ann Arbor, Chairman, Cancer Control Committee, Michigan State Medical Society.
- P.M.
- 12:15 Subscription Luncheon (Furniture Club, Pantlind Hotel)

END OF CANCER CONTROL DAY

WOMAN'S AUXILIARY

TENTATIVE PROGRAM

All activities not otherwise indicated will be held in the Pantlind Hotel, Grand Rapids

TUESDAY, SEPTEMBER 20

- P.M.
- 6:30 Welcoming Dinner (Continental Room)
- 8:00 Style Show (Continental Room)

WEDNESDAY, SEPTEMBER 21

- A.M.
- 10:30 Pre-convention Board Meeting (Mezzanine Lounge, Pantlind Hotel)
- P.M.
- 1:00 Luncheon (Schubert Room)
- 6:30 Banquet. Honoring the National President, Mrs. David Allman of Atlantic City (Furniture Club)

AUGUST, 1949

- 10:00 Open House and Reception. Honoring District Delegates and Presidents of the Woman's Auxiliary and of the Michigan State Medical Society (Schubert Room)

THURSDAY, SEPTEMBER 22

- A.M.
- 8:30 Organization Breakfast for District Directors. Sponsored by Organization Chairmen Mrs. Don Wright and Mrs. Oscar D. Stryker (President's Suite)
- 10:00 Annual Board Meeting (Red Room, Civic Auditorium)
- P.M.
- 1:00 Annual Luncheon (Furniture Club)
- 3:00 Post-convention Board Meeting (Furniture Club)

SCIENTIFIC EXHIBITORS

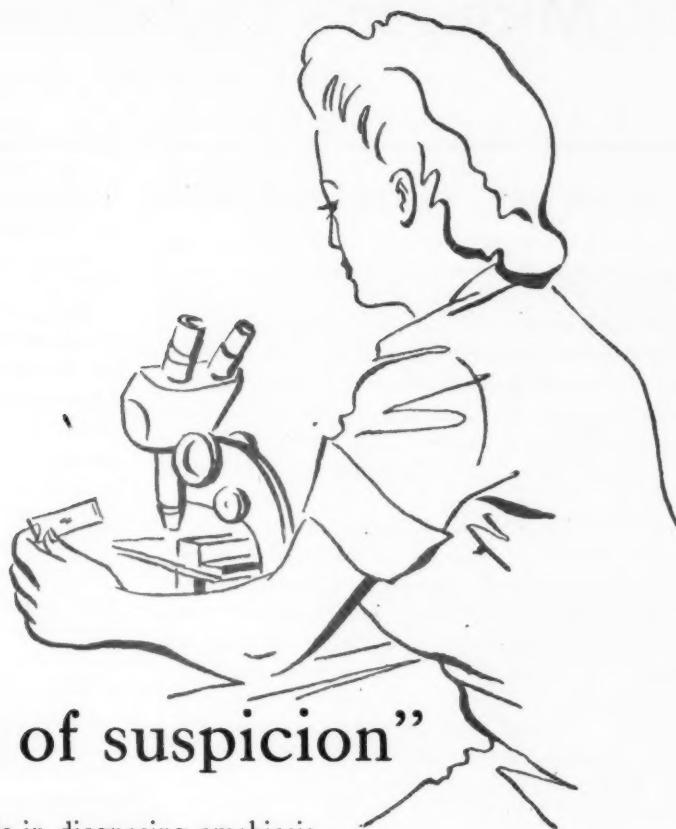
Space
Number

- I Detroit Society for Prevention of Blindness and Grand Rapids Association for the Blind and for Sight Conservation.
"Glaucoma"
- II National Foundation for Infantile Paralysis.
"Distribution of Poliomyelitis Virus in a Community"
- III Michigan Diabetes Association.
"Diabetes Control"
- IV Hillsdale County Medical Society Cancer Control Committee.
"Hillsdale Plans for Tumor Detection"
- V Michigan Department of Health.
"Health in Action"
- VI Harper Hospital Medical Staff, Detroit.
"(1) Endocrinopathics; (2) Radioactive Isotopes."
- VII Wayne University College of Medicine.
"The Use of Medical Photography and Illustration in Teaching and Research"
- VIII University of Michigan Medical School. (The Neuropsychiatric Institute).
"Scientific Services of the Medical School and Hospital at the University of Michigan."
- IX Michigan Heart Association, Inc., Michigan Society for Crippled Children and Adults, Inc., and Rheumatic Fever Control Committee, MSMS.
"MSMS Rheumatic Fever Control Program"
- X Michigan Crippled Children Commission.
"Physical Restoration of the Severely Handicapped Child"
- XI Michigan Society of Anesthesiologists.
"Respiration in Relation to Anesthesia"
- XII Grand Rapids Committee of Region Fracture Committee, American College of Surgeons.
"Fracture of Tibia"
- XIII American National Red Cross.
"The Blood Program"
- XIV International College of Surgeons.
- XV MSMS Public Relations Committee.
"The Public Relations Program."

Technical Exhibitors

Booth Number	Booth Number
Abbott Laboratories, North Chicago, Ill.C-10	Maltbie Chemical Co., Newark, N. J.B-8
Allen Agency, Detroit, Mich.F-2(a)	S. E. Massengill Company, Bristol, Tenn.A-12
A. S. Aloe Company, St. Louis, Mo.B-1	J. W. McCrae X-Ray Company, Detroit, Mich.A-10
American Hospital Supply Corp., Evanston, Ill.D-15	McKesson Appliance Company, Toledo, OhioE-8
Ames Company, Inc., Elkhart, IndianaF-11	Mead Johnson & Company, Evansville, Ind.A-24, A-25
Armour & Company, Chicago, Ill.B-16	Medical Arts Surgical Supply Company, Grand Rapids, Mich.C-4, C-5, C-6
Ayerst, McKenna & Harrison, Ltd., New YorkB-13	Medical Film Guild, A-8 and New YorkCinema Room
Baker Laboratories, Cleveland, OhioE-3	Medical Protective Company, Fort Wayne, Ind.E-5
Bard-Parker Company, Inc., Danbury, Conn.B-18	Merck & Company, Inc., Rahway, N. J.B-14
Barlow-Maney Labs., Inc., Cedar Rapids, IowaF-3	Wm. S. Merrell Company, Cincinnati, OhioA-23
A. C. Barnes Company, New YorkA-11	Michigan Medical Service, Detroit, Mich.B-2
Barry Laboratories, Inc., Detroit, Mich.B-12	Mid-America Sales Corp., Detroit, Mich.F-9
Becton-Dickinson & Company, Rutherford, N. J.C-18	Middleton's, Inc., Grand Rapids, Mich.E-16
Bilhuber-Knoll Corporation, Orange, N. J.B-7	C. V. Mosby Company, St. Louis, Mo.B-15
The Borden Company, New YorkF-10	National Drug Company, Philadelphia, Pa.E-11
Brooks Appliance Company, Chicago, Ill.D-14	The Nestle Company, Inc., New YorkF-13
Burroughs Wellcome & Co., Inc., New YorkD-10	Wm. R. Niedelson Company, Detroit, Mich.D-17
California Pharmacal Company, Detroit, Mich.F-6	Noble-Blackmer, Inc., Jackson, Mich.E-12
Camel Cigarettes, New YorkA-21	Ortho Pharmaceutical Corporation, Raritan, N. J.A-5
Cameron Heartometer Company, Chicago, Ill.D-16	Parke, Davis & Co., C-12, C-13, Detroit, Mich.C-14, C-15
Cameron Surgical Specialty Company, Chicago, Ill.A-16	Pelton & Crane Company, Detroit, Mich.B-3
Carnation Company, Los Angeles, Calif.E-9	Pet Milk Sales Corporation, St. Louis, Mo.C-8
Ciba Pharmaceutical Products, Inc., Summit, N. J.E-7	Philip Morris & Company, Ltd., New YorkD-13
Coca-Cola Company, Atlanta, Ga.A-18	Physicians Service Laboratory, DetroitF-14
Commercial Solvents Corporation, New YorkF-15	Picker X-Ray Corporation, New YorkD-7, D-8
Detroit Creamery Company, Detroit, Mich.F-18	Pitman-Moore Company, Indianapolis, Ind.E-10
Detroit X-Ray Sales Company, Detroit, Mich.B-4, B-5	Procter & Gamble Company, Cincinnati, OhioD-18
Dictaphone Corporation, Detroit, Mich.F-12	Professional Management, Battle Creek, Mich.D-3
Dietene Company, Minneapolis, Minn.B-17	The Quarry, Incorporated, Ann Arbor, Mich.B-6
Doho Chemical Corporation, New YorkC-7	Randolph Surgical Supply Co., Detroit, Mich.B-9
E & J Resuscitator Company, Detroit, Mich.F-7	Rystan Company, Inc., Mount Vernon, N. Y.E-13
Electronic Surgical Equipment Company, Inc., Philadelphia, Pa.A-14	Sandoz Chemical Works, Inc., New YorkA-4
Encyclopaedia Britannica, Inc., Detroit, Mich.A-22	W. B. Saunders Company, Philadelphia, Pa.A-7
Farnsworth Laboratories, Chicago, Ill.E-15	Schenley Laboratories, Inc., New YorkC-1
H. G. Fischer & Company, Chicago, Ill.A-1	Schering Corporation, Bloomfield, N. J.B-19
C. B. Fleet Company, Inc., Lynchburg, Va.D-11	G. D. Searle & Company, Chicago, Ill.D-2
General Electric X-Ray Corporation, Chicago, Ill.A-17	Sharp & Dohme, Inc., Philadelphia, Pa.D-19
Gerber Products Company, Fremont, Mich.C-9	Smith, Kline & French Laboratories, Philadelphia, Pa.E-4
Hanovia Chemical & Mfg. Co., Newark, N. J.C-3	Spencer Incorporated, New Haven, Conn.C-11
J. F. Hartz Company, Detroit, Mich.B-10, B-11	E. R. Squibb & Sons, New YorkA-26
Hoffmann-La Roche, Inc., Nutley, N. J.E-18	Swift & Company, Chicago, Ill.A-6
Holland-Rantos Company, Inc., New YorkF-17	Testagar & Company, Inc., Detroit, Mich.F-8
G. A. Ingram Company, Detroit, Mich.D-4, D-5, D-6	Upjohn Company, Kalamazoo, Mich.F-16
The Junket Folks, Little Falls, N. Y.A-13	U. S. Vitamin Corporation, New YorkF-5
C. B. Kendall Company, Indianapolis, Ind.F-4	Universal Products Co., Norristown, Pa.F-2(b)
A. Kuhlman & Company, Detroit, Mich.A-19, A-20	VanPelt & Brown, Inc., Richmond, Va.A-2
Lanteen Medical Laboratories, Inc., Chicago, Ill.E-14	Westinghouse Electric Corp. Pittsburgh, Pa.C-16, C-17
Lea & Febiger, Philadelphia, Pa.F-1	White Laboratories, Newark, N. J.D-9
Lederle Laboratories, New YorkC-2	Winthrop-Stearns, Inc., New YorkD-12
Liebel-Flarsheim Company, Cincinnati, OhioA-9	Wolverine X-Ray Sales & Service, Detroit, Mich.E-6
Eli Lilly & Company, Indianapolis, Ind.E-2	Wyeth Incorporated, Philadelphia, Pa.C-19
J. B. Lippincott Company, Philadelphia, Pa.A-27	Zimmer Mfg. Company, Warsaw, Ind.E-17
M & R Dietetic Laboratories, Inc., Columbus, O.E-1	
Maico Hearing Service of Michigan, Grand RapidsA-15	

Number
B-8
A-12
A-10
E-8
 24, A-25
5, C-6
 A-8 and
 a Room
E-5
B-14
A-23
B-2
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E-16
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E-10
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D-3
B-6
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D-19
E-4
C-11
A-26
A-6
F-8
F-16
F-5
 F-2(b)
A-2
C-17
D-9
D-12
E-6
C-19
E-17



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The difficulties and pitfalls in diagnosing amebiasis are stressed frequently in medical literature.

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1. Warshawsky, H.; Nolan, D. E., and Abramson, W.: Hepatic Complications of Amebiasis, New England J. Med. 235:678 (Nov. 7) 1946.
2. Manson-Bahr, P.: Some Tropical Diseases in General Practice: “A Post-War Legacy,” Glasgow M. J. 27:123 (May) 1946.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

STATE AID FOR LOCAL HEALTH DEPARTMENTS

The legislature has appropriated \$320,000 in state aid for local health departments during the year beginning July 1. While this amount falls far short of the \$1,800,000 asked by the Citizens Committee of 100, it is \$123,000 above the current year's grant, and \$126,500 more than the state budget officials had recommended.

The legislature, in appropriating the \$320,000, stipulated that it be divided equally among the counties of the state providing full-time local health services to their residents.

This so-called equalization plan is particularly beneficial to two-county or multiple-county health departments. Where previously one-county units received \$3,500; two-county units, \$5,000; and three (or more) county units, \$6,000 in state aid; one-county units will now receive \$4,444.44; two-county units, \$8,888.88; three-county units, \$13,333.32; and four-county units, \$17,777.76 in state aid. (These figures are based on seventy-two counties to include Lapeer which is expected to open a department this year.)

* * *

NINTH ANNUAL RAGWEED POLLEN SURVEY

- The ninth annual Michigan ragweed pollen survey got under way in 57 stations in the state on July 15 and continues until September 15. The survey, planned to provide hay fever sufferers with information on pollen concentration, is being conducted in more cities than has any previous survey. This increased service is possible only through the co-operation of local hospitals, laboratories and health departments.

New stations this year are located in Lapeer, Mio, Roscommon, East Tawas and Paris. The station at Mackinaw City and one station in Bay City have been discontinued.

Thirty-two of the collecting stations are in laboratories where there are personnel trained to count the pollen. Reports from these laboratories will be submitted directly to the local health officer. The remaining collecting stations will send their slides to regional counting laboratories which will send reports to the local health officers. Where there are no local health officers, the reports will be submitted directly to the Michigan Department of Health.

The decentralized method of handling reports makes it possible for the local health officer to give each day to press and radio and other interested individuals report of the pollen concentration in his area.

Local health officers are furnished blanks for recording the daily pollen counts in their areas and for transmitting the information to the Michigan Department of Health along with the daily morbidity reports.

* * *

The name of the Division of Local Health Services of

the Michigan Department of Health is now changed to the Division of Local Health Administration.

Under the Division of Local Health Administration, there is a Section of Local Health Services.

Arthur G. Baker, M.D., M.P.H., will become chief of the Section of Local Health Services later this month. Dr. Baker, who has his Master's Degree in Public Health from the University of Michigan School of Public Health, recently was director of the Allegan County Health Department.

* * *

C. Dale Barrett, M.D., M.P.H., has joined the staff of the Division of Laboratories as co-ordinating physician. Dr. Barrett, who received his Master's Degree in Public Health from the University of Michigan this spring, formerly was director of the Ottawa County Health Department.

* * *

Clarence Poppen, M.D., M.P.H., has joined the staff of the Division of Disease Control, Records & Statistics, as chief of the Section on Cancer and Adult Health Services.

Dr. Poppen, who for the past four years has been associated with Dr. Frederick Collier in the surgical unit of University Hospital, Ann Arbor, was a practicing physician in Hillsdale County for fourteen years.

* * *

Dr. K. E. Markuson, director of the Division of Industrial Health of the Michigan Department of Health for the past ten years, resigned effective July 1 to become assistant chief of the Bureau of Industrial Hygiene of the Connecticut Department of Health. John Soet, chief engineer of the Division, has been named acting director.

Dr. Markuson is president of the American Conference of Governmental Industrial Hygienists, president of the Michigan Association of Industrial Physicians and Surgeons and chairman of the Michigan State Medical Society's committee on Industrial Health. Mr. Soet has been with the Division for eleven years and has been its chief engineer for the past five years.

* * *

Dr. John M. Lynch, a 1946 graduate of the University of Michigan Medical School, who recently completed nine months of Industrial Health training in Yale University, has joined the staff of the Division as an industrial health physician.

* * *

Marvin Nelson, M.D., who has been associated with the Department of Dermatology and Syphilology of the University of Michigan, is the new medical director of the Michigan Rapid Treatment Center, Ann Arbor, succeeding S. J. Axelrod of USPHS.

More than 12,000 cases of venereal disease have been

(Continued on Page 1060)

Facts About Conception Control

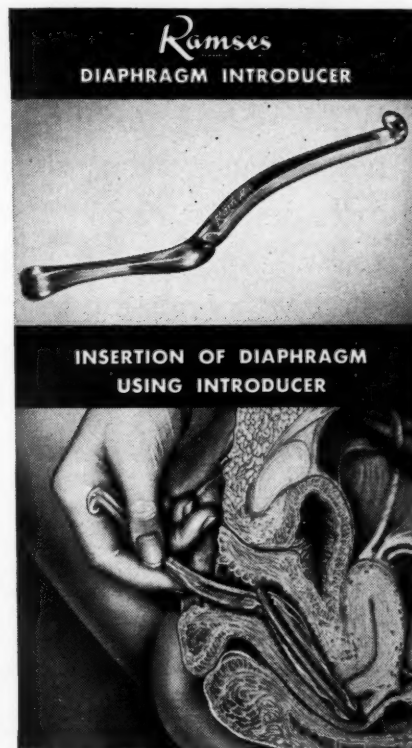
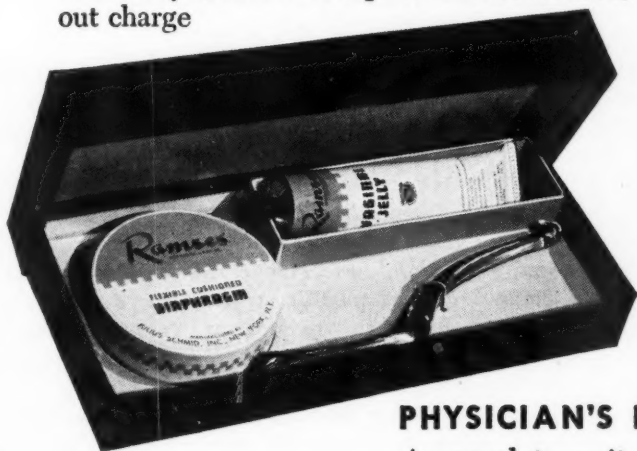
THE USE OF THE DIAPHRAGM INTRODUCER

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- Ease of removal assured by bluntly hooked end

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A complete unit for conception control. Contains (1) a "RAMSES" Flexible Cushioned Diaphragm of the prescribed size, (2) a "RAMSES" Diaphragm Introducer of corresponding size, and (3) a tube of "RAMSES" Vaginal Jelly† (regular size).

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† Active Ingredients: Dodecaethyleneglycol Monolaurate 5%; Boric Acid 1%; Alcohol 5%.



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(Continued from Page 1058)

treated in the Michigan Rapid Treatment Center in Ann Arbor since it opened its doors July 5, 1944.

All patients treated are referred to the Center from health departments, clinics or practicing physicians.

Of the cases treated, 58 per cent have been males and 51 per cent have been under the age of twenty-five years. Approximately 2,200 cases were treated in the past twelve months.

The Center uses a ten-day to two-weeks intensive treatment schedule for syphilis patients and a one- to three-day treatment schedule for gonorrhea patients. The Center also provides diagnostic consultation service for private physicians, and also makes spinal fluid and other examinations for syphilis for physicians or health departments having no facilities for making these examinations.

* * *

R. W. Menges, D.V.M., USPHS employe assigned to the Division of Disease Control, Records and Statistics, for the first six months of this year, was transferred to the histoplasmosis laboratory at the University of Kansas medical school.

* * *

Norman Henderson and W. D. Ferguson of the Division of Laboratories are authors of an article, "Bacteriophage Typing of Salmonella Typhi" in the June issue of *The Journal of Laboratory and Clinical Medicine*.

* * *

Public health people from New Zealand, Greece, China, Brazil, Columbia, Chile, Nova Scotia and British Columbia arrived in the Department during June and early July for study or observation.

They were E. F. Scott, chief engineer, Christchurch Drainage Board, New Zealand; Dr. A. P. Kanellakis of Greece, graduate student at the University of Michigan; Jane Pan, former supervising nurse in Nanking, China; Dr. Emmanuel deCastro of Rio de Janeiro, Brazil, who has been studying at Yale University; Dr. Miguel Ordonez of Colombia, a graduate student of Michigan State College; B. Suario Pentanek of Chile; Dr. Rice of Nova Scotia; and Margaret Ross and Florence Campbell, supervising nurses from British Columbia.

INCIDENCE OF CERTAIN REPORTABLE DISEASES

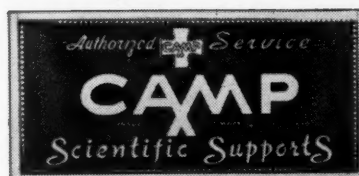
Disease	June 1949	June 1948
Diphtheria	13	7
Gonorrhea	807	887
Lobar pneumonia	89	85
Measles	2224	6665
Meningococcic meningitis	8	12
Pertussis	153	135
Poliomyelitis	21	5
Rheumatic fever	62	58
Scarlet fever	451	549
Syphilis	732	1143
Tuberculosis	423	552
Typhoid fever	4	8
Undulant fever	15	13
Smallpox	0	0

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NEWS MEDICAL

David B. Ruskin, M.D., of Caro, Michigan, published an article "Mesantoin (Methylphenylethyl Hydantoin) in Treatment of Epilepsy in a State Hospital," in *Archives of Neurology and Psychiatry*, November, 1948.

Sidney Friedlaender, M.D., and Alex S. Friedlaender, M.D., of Detroit, Michigan, published an article, "Antihistamine Therapy in Allergy," in *The Journal-Lancet*, June, 1949.

F. Bruce Fralick, M.D., and Robert D. Kiess, M.D., Ann Arbor, Michigan, published an article, "Use of Antihistaminic Drugs in Control of Atropine Dermatitis and Conjunctivitis," in *Archives of Ophthalmology*, May, 1949.

Clifford D. Benson, M.D., Grover C. Pemberthy, M.D., and Edward J. Hill, M.D., Detroit, published a paper, "Hernia Into the Umbilical Cord and Omphalocele (Amniocele) in the Newborn," in the *Archives of Surgery* June, 1949.

An article published in The JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY by R. L. Hass, M.D., entitled "Some Practical Considerations About Endometriosis,"

appeared in *The General Practitioner* of Australia and New Zealand, May 15, 1949.

* * *

The first Michigan Cancer Conference, sponsored by the Michigan State Medical Society, Michigan Department of Health and the Michigan Division of the American Cancer Society, will be held at the Hotel Olds, Lansing, on October 11, 1949. The meeting will convene at 10:30 a.m. Invitations have been sent to medical, dental and nursing groups and to all lay health minded organizations of the state, to news organizations and other groups, inviting them to send representatives to this meeting.

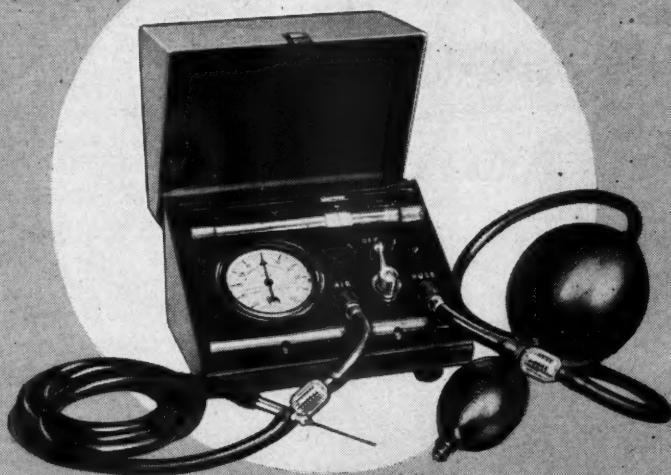
The cancer program in Michigan will be discussed from the standpoint of providing facilities throughout the state for the early diagnosis of cancer. The proposed local programs are to be built around the Hillsdale Plan for Tumor Detection with modifications to meet local conditions.

(Continued on Page 1064)



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One complete excursion of the piston delivers 150 cc of air. Turning the valve immediately starts the piston in the other direction, continuing to supply air without any change of connections. Air can be delivered either slowly or rapidly as desired. An aneroid manometer is in the circuit at all times, indicating air pressure during instillation as well as the pressure in the chest when the valve is turned to zero.

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(Continued from Page 1062)

As a result of this meeting, it is hoped lay people and physicians will unite in a program that will strike a very decisive blow against cancer in this state.

* * *

The Committee on Iodized Salt of the Michigan State Medical Society held a recent meeting in Detroit.

Dr. O. P. Kimball of the Goiter Study Committee of the United States Public Health Surveys gave a review of the national picture regarding iodized salt. He stated that following the failure of the Bolton bill to have all table salt iodized, the Goiter Study Committee agreed to stop attempting further legislation to permit the Salt Manufacturers Association to introduce a campaign of education, advertising and sales promotion to stimulate the sale of iodized salt. The program of education which is to start in June, 1949, will consist of four parts:

1. The material to be submitted to the advertising head of the salt companies for their use.
2. Speakers to attend meetings of the association of State Health Officers to speak in behalf of this program.
3. Radio commercials to be used by the United States Public Health Medical Association and the State Medical Societies, such as: "Simple goiter is easiest known disease to prevent—use iodized salt."
4. The plans for a re-survey of the Michigan schools previously studied in regard to the use of iodized salt were outlined. Dr. Kimball and Dr. Towsley were suggested to follow through with this survey and detailed plans for same will be formulated in the near future.

Dr. Gerstner suggested that a five-minute talk to delegates of the Michigan State Medical Society be given to apprise them of the importance of this problem:

* * *

Dr. Charley Smyth, who has been assistant medical director of Wayne County General Hospital since 1941, is leaving September 1 to become a member of the faculty of the University of Colorado, Denver, where he will be Assistant Director of Postgraduate Medicine and assistant professor of Medicine in the Medical School.

* * *

The United States Public Health Service of the Federal Security Agency announce a competitive examination for appointment of medical officers of the United States Public Health Service will be held on October 3, 4, and 5, 1949. Applications must be received *not later than September 5, 1949*. Appointments will be made in the grade of Assistant Veterinarian (1st Lt.) and Senior Assistant Veterinarian (Capt.). Appointments are permanent in nature and provide opportunities to qualified veterinarians for a lifetime career in research and public health. Assignments are made with consideration for the officer's preference, ability, and experience. This examination will be primarily for public health and re-

(Continued on Page 1066)

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Feinberg, S. M.: Postgrad. Med. 3: 92 (1948).

"Apparently, desensitization treatment is still the method of choice, and the antihistaminic drugs cannot be considered as substitutes."

Levin, L.; Kelly, J. F., and Schwartz, E.: New York State J. Med. 48: 1474 (1948).

The antihistaminic drugs "are valuable additions to our armamentarium, but do not . . . supplant the specific desensitizing injections."

Brown, G. T.: M. Ann. District of Columbia 16:675 (1947).

Pollen desensitization "still remains the treatment of choice in hay fever."

Rosen, F. L.: J. M. Soc. New Jersey 45: 390 (1948).

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(Continued from Page 1064)

search veterinarians, and successful candidates will be assigned to positions which will probably involve research, field investigation, and food sanitation.

Appointments will be made in the grades of Assistant Surgeon (1st. Lt.) and Senior Assistant Surgeon (Capt.). Appointments are permanent in nature and provide opportunities to qualified physicians for a life-time career in clinical medicine, research, and public health. All commissioned officers are appointed to the general service and are subject to change of station.

* * *

Sez Cecil Palmer, of London, according to *The Detroit Medical News*: "Socialized medicine is workable only in heaven where it isn't needed or in hell where they already have it."

* * *

The Northern Tri-State Medical Association (Michigan, Indiana, Ohio) will hold its 1950 convention in Grand Rapids on April 11, 1950. William H. Gordon, M.D., 1553 Woodward Avenue, Detroit, is Secretary of the Tri-State Association.

* * *

A total of 13,221 physicians were registered at the 1949 AMA Session in Atlantic City. In addition, 14,671 guests were registered—a total of 27,892 M.D.s and guests (not including the exhibitors or members of their family.)

* * *

K. E. Markuson, M.D., Lansing, who has served as director of the Bureau of Industrial Health since July, 1938, resigned as of July 1, 1949, to assume the position as assistant director of the Bureau of Industrial Hygiene of the Connecticut State Health Department, with headquarters at Hartford, Connecticut. Dr. Markuson will be assistant to Albert S. Gray, M.D., long-time Bureau Director.

Dr. Markuson served as chairman of the MSMS Industrial Health Committee for four years, during which time the three Industrial Health Conferences of the Michigan State Medical Society were held in Detroit.

The Michigan State Medical Society wishes Dr. Markuson full success and enjoyment in his new location.

* * *

The American College of Surgeons will hold its 35th Clinical Congress at the Stevens Hotel, Chicago, October 17-21, 1949.

* * *

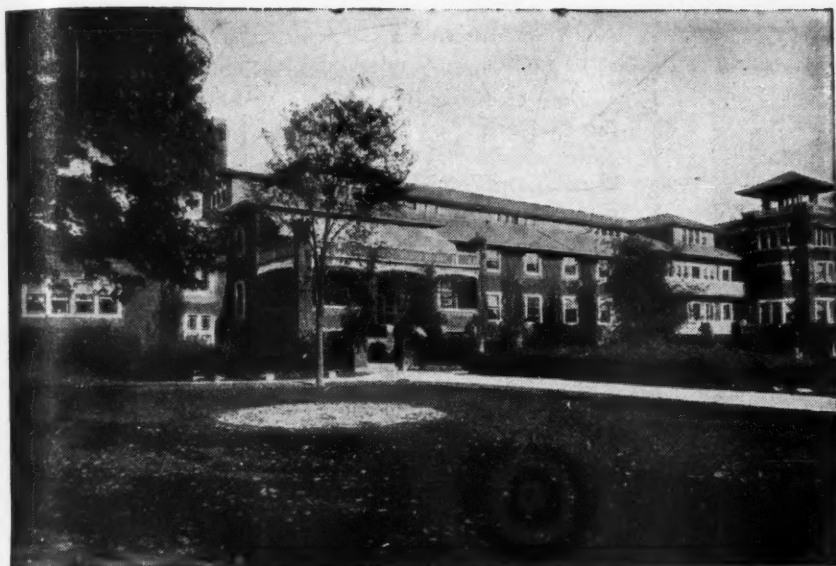
C. E. Umphrey, M.D., Detroit, addressed the Mount Clemens Kiwanis Club on June 22. His subject was "Political Medicine is Never Good Medicine."

* * *

The International College of Surgeons, United States Chapter, will hold its Fourteenth Assembly at Haddon Hall, Atlantic City, on November 8-11, 1949. The convocation will be held in Convention Hall. For program, write Secretary Arnold Jackson, M.D., 1516 Lake Shore Drive, Chicago, Illinois.

* * *

(Continued on Page 1068)



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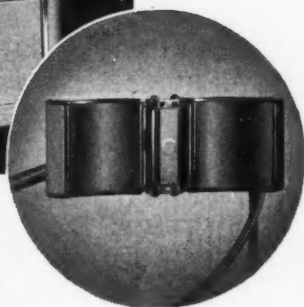
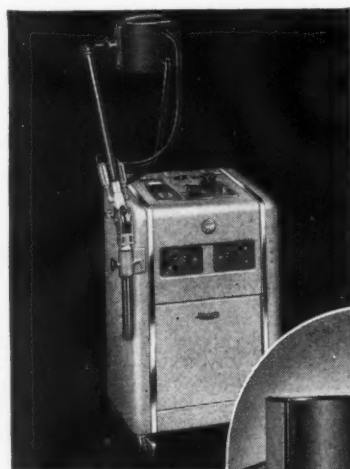
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(Continued from Page 1066)

J. O. Thomas, M.D., was signally honored by the citizens of North Branch, where he has practiced for fifty-five years, on Sunday, July 24. More than 3,500 patients and friends gathered to celebrate "Doctor Thomas Day" and to eulogize their long-time friend and medical practitioner for the outstanding record of service rendered to his community over the years.

* * *

Wm. A. Hudson, M.D., Detroit, was re-elected Historian of the American College of Chest Physicians at the 15th Annual Meeting held in Atlantic City last June. Willard B. Howes, M.D., Detroit, is Governor for the State of Michigan.

The Michigan Chapter of the ACCP elected the following officers for 1949: Wm. P. Chester, M.D., Detroit, president; Cletus J. Golinvaux, M.D., Monroe, vice president; and C. P. Mehas, M.D., Pontiac, secretary-treasurer.

* * *

At the *Grand Rapids Postgraduate Clinic Day*, held in May, a total of 417 doctors of medicine registered. This was fit testimony for the outstanding program arranged by the Kent County Medical Society.

* * *

Correction: The name of Henry K. Ransom, M.D., which appeared on page 778 of the June JOURNAL, was misspelled "Fansom." Apologies!

* * *

The *Mississippi Valley Medical Society* will hold its 14th meeting at the Jefferson Hotel, St. Louis, September 28-29-30, under the presidency of Alphonse McMahon, M.D., of St. Louis University. For program, write Secretary Harold Swanberg, M.D., 209 W.C.U. Bldg., Quincy, Illinois.

* * *

Russell N. DeJong, M.D., Ann Arbor, is chairman of the Education Committee and Dave B. Ruskin, M.D., of Caro is chairman of the Program Committee of the American Academy of Neurology which held its first scientific meeting at French Lick in June, 1949.

* * *

The *American College of Physicians and the W. K. Kellogg Foundation* will shortly inaugurate a program of postgraduate medical fellowships, whereby young physicians in the Latin American countries will be brought to the United States for a year or more of special training.

* * *

The sum of \$275,000 recently was presented to the University of Pennsylvania by the Penn Mutual Life Insurance Company for two projects: (a) \$250,000 to build a Penn Mutual Heart Clinic in the University's new medical center; and (b) \$25,000 for the extension of the cancer research project at the University.

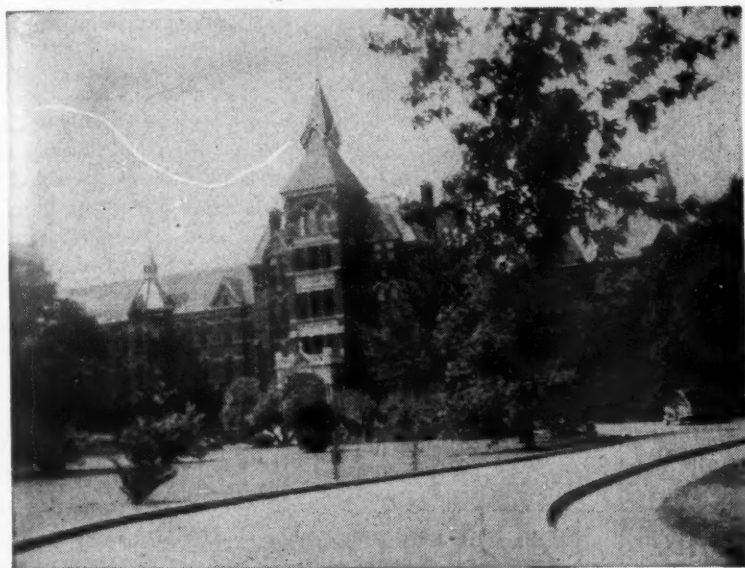
* * *

"*Modern Treatment of Fractures and Other Traumatic Conditions*" is the subject of a postgraduate course at Massachusetts General Hospital sponsored by the Harvard Medical School and running from October 24 to November 3, 1949. For program, write Harvard Medical School,

(Continued on Page 1070)

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(Continued from Page 1068)

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* * *

Harvey C. Bodmer, M.D., Kalamazoo, recently returned from a tour of Europe where he observed medical practice, especially under socialized auspices in England.

* * *

E. F. Sladek, M.D., president of the Michigan State Medical Society and chairman of the Traverse City Chamber of Commerce Health Committee, presided recently at an organizational meeting for proprietors of hotels, restaurants, food shops and soda fountains to draft plans for conducting a large scale food handling school. This project will serve as a pilot model for similar schools to be conducted throughout Michigan.

* * *

At the Upper Peninsula Medical Society meeting Blaney Park, June 17-19, 247 physicians were registered. Guest speakers included: A. J. French, M.D., Ann Arbor, J. A. Cowan, M.D., Lansing, F. B. Fralick, M.D., Ann Arbor, E. S. Gurdjian, M.D., Detroit, R. J. Noer, M.D., Detroit, J. H. Maxwell, M.D., Ann Arbor, D. L. Bishop, M.D., H. B. Elliott, M.D., H. W. Woughter, M.D., and G. J. Curry, M.D., all of Flint; and E. A. Osius, M.D., Detroit.

* * *

Robert V. Funsten, M.D., Professor of Orthopedic Surgery at the University of Virginia Medical School, and a former practitioner of Detroit, died at his home in Charlottesville, Virginia, on July 25.

* * *

The Academy of General Practice of Wayne County will hold its annual autumn clinic at Henry Ford Hospital on October 26-27, 1949.

* * *

L. Fernald Foster, M.D., Bay City, and Cyrus C. Sturgis, M.D., Ann Arbor, were guest speakers at the Rocky Mountain Medical Conference held in Butte, Montana, August 2-3-4, 1949. Dr. Foster also is guest speaker at the convention of the Michigan Consumer Finance Association, Statler Hotel, Detroit, October 27; his subject will be "Political Medicine—To Be or Not To Be?"

* * *

The National Institute of Health of the Public Health Service, Federal Security Agency, announces a grant of \$12,000 to Wayne University for a study of "Physiological Processes in Movable Joints and Associated Structures." Also a total of \$16,524 to the University of Michigan for three studies: "(a) Chemotherapy of Tuberculosis; (b) Oxygen Studies on Mammalian and Lower Forms; and (c) A Study of the Influence of Various Factors on the Formation of Vitamins in Green Plants."



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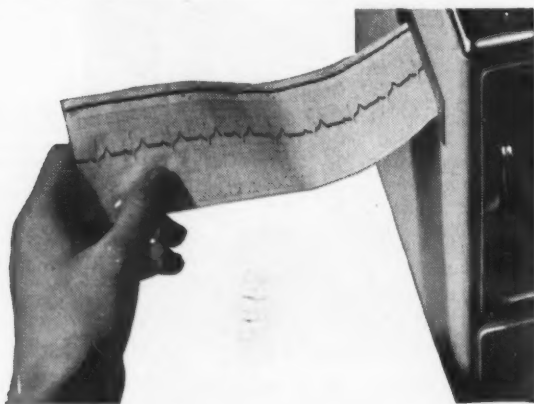
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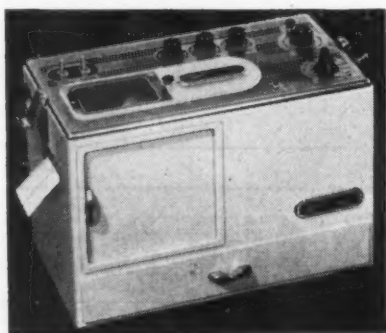
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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

HOW TO BECOME A DOCTOR. By George R. Moon, A.B., M.A., Examiner and Recorder, University of Illinois Colleges of Medicine, Dentistry and Pharmacy. Philadelphia, Toronto: The Blakiston Company, 1949. Price \$2.00.

This is a much-needed book, making available to the prospective student the requirements for premedical training, outlining the chances of entry into medical schools, and giving suggestions for the premedical training: where to take it, what to take, and where to secure advice when necessary. Also given are the approved four-year medical schools in the United States, including special entrance requirements, rates, tuition. A chapter is devoted to how to gain admission to medical schools, the tests required, the forms to be filled and the interviews. Special problems are discussed, such as: women in medicine, success or failure in school, special problems as expenses, outside employment, health, marriage. Similar information is given with reference to dentistry, pharmacy. This book should be available for boys and girls in high school who may have an inclination to study medicine.

PUBLIC HEALTH STATISTICS. By Marguerite F. Hall, M.A., Ph.D., Associate Professor of Public Health Statistics, School of Public Health, University of Michigan. Second edition, revised. New York: Paul B. Hoeber, Inc., 1949. Price \$7.50.

The book was originally intended to be used as a text in basic courses in public health statistics. It is said that almost as much is learned now in the public health fields from statistics as from the test tube. Facts and information about numbers of people, deaths, marriages, births, et cetera, have been matters of general interest for a long time. The Romans kept some such records, and took censuses of their people for military purposes. The earliest known compilations of death records was by order of the Council of London in 1532. The science now is unbelievably vast and accurate. This text shows how to make records, how to interpret them, and gives a considerable number of formulas for use in the work. There is much of theory but more of logic and fact. A valuable and almost indispensable book for students in public health work.

THE HEBREW MEDICAL JOURNAL, Volume 1, 1949, 22nd year of publication. Bi-lingual, semi-annual journal. Edited by Moses Einhorn, M.D.

In this issue a symposium is presented on current health conditions in Israel, with the following subjects: "Errors and Faults in Diagnosis and Treatment of Infectious Diseases in Israel," by Moshé Fischel, M.D. In his article Dr. Fischel discusses the most prevalent diseases, such as malaria, typhus and dysentery, and shows how they take a different course in Israel than in the Western Hemisphere.

"In Clinical Forms of Tuberculosis Among the Jews in Israel," Dr. Rudolf Levy gives a summary of the prev-

(Continued on Page 1074)

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(Continued from Page 1072)

alence of this disease among the Jews in Israel, as compared with other peoples. "Public Dental Health in Israel," by Max Laufer, D.D.S., is a description of the remarkable progress made in that country in just a few years in the dental health of the population.

Under the heading, "Old Hebrew Medical Manuscripts," Dr. Z. Muntnner presents an interesting paper on "Poison, Charm and Love Potions Among Jews and Other Peoples." In the section devoted to Personalities, Dr. Z. J. Plashkes of Tel Aviv writes on the first native Palestinian physicians, describing how these pioneers laid the groundwork for the present medical progress in Israel.

CLINICAL AUSCULTATION OF THE HEART. By Samuel A. Levine, M.D., Clinical Professor of Medicine, Harvard Medical School; Physician, Peter Bent Brigham Hospital; and W. Proctor Harvey, M.D., Research Fellow in Medicine, Harvard Medical School Assistant in Medicine, Peter Bent Brigham Hospital. 327 pages with 286 figures. Philadelphia and London: W. B. Saunders Company, 1949. Price \$6.50.

A vast amount of the knowledge obtainable from the stethoscope is not being utilized, and this volume is intended to stimulate doctors to take every advantage of the simple means at hand, for every doctor carries a stethoscope. Cases are presented, auscultation findings given and electrocardiographs given. The illustrations are profuse. Interpretation of murmurs, and other findings are given special attention. A stimulating book.

VOCABULARY GUIDE. A Teacher's Supplement to The American Nurses Dictionary. By Alice L. Price, R.N. Philadelphia & London: W. B. Saunders Company, 1949.

This book is unique in that there are no definitions, just a listing of various sections, such as Anatomy and Physiology, Bandaging, Chemistry, throughout the field of practice of medicine, and under each heading an alphabetical list of the words used. That and nothing else; the idea being to supply a guide in the teaching process. The whole book is printed in typewriter type, very neat, with paper cover.

MEDICINE OF THE YEAR—First issue, 1949. *Internal medicine:* Hugh J. Morgan, M.D., Professor of Medicine, Vanderbilt University; *Obstetrics:* Frank Whitacre, M.D., Professor of Obstetrics and Gynecology, University of Tennessee; *Pediatrics:* Henry G. Poncher, M.D., Professor of Pediatrics, University of Illinois; *Surgery:* Warren H. Cole, M.D., Professor of Surgery, University of Illinois; *Editorial Direction:* John B. Youmans, M.D., Dean, College of Medicine University of Illinois. Philadelphia: J. B. Lippincott Co., 1949. Price \$5.00.

Dean Youmans, of the Medical College of University of Illinois, has assembled a group of advisers, and had reviewed all the medical literature of the year. Each assistant has then written his observations of advances, new discoveries, old things newly observed, and in general, has compiled the new and significant things in his special field. This is written in narrative form, but at the end of the chapter is a set of references so that the student can do further reading, and supplement the information given in this book. The practitioner is thus provided with the new or useful material from the preceding year's literature, of course depending on the

(Continued on Page 1076)

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GYNECOLOGY—Intensive Course, two weeks, starting September 26, October 24. Vaginal Approach to Pelvic Surgery, one week, starting September 19, November 7.

OBSTETRICS—Intensive Course, two weeks, starting September 12, November 7.

MEDICINE—Intensive General Course, two weeks, starting October 3. Gastroenterology, two weeks, starting October 24. Gastroscopy, two weeks, starting September 26, October 24. Electrocardiography and Heart Disease, four weeks, starting September 7.

DERMATOLOGY—Formal Course, two weeks, starting October 24. Informal clinical course every two weeks.

ROENTGENOLOGY—Diagnostic and Lecture Course first Monday of every month. Clinical Course third Monday of every month. X-ray therapy every two weeks.

UROLOGY—Intensive Course, two weeks, starting September 26. Ten-day Practical Course in Cystoscopy every two weeks.

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(Continued from Page 1074)

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ability of the editors to screen out the less valuable which has been printed. The book has successfully accomplished this purpose, and is a useful handbook. The chapter on Otolaryngology was contributed by A. C. Furstenberg, of the University of Michigan.

POLIOMYELITIS. Papers and Discussions presented at the First International Poliomyelitis Conference. Compiled and edited for the International Poliomyelitis Conference. Philadelphia: J. B. Lippincott Company, 1949. Price \$5.00.

The first session, "The Importance of Poliomyelitis as a World Problem," was moderated by Thomas Francis, Jr., of the University of Michigan. The second session was devoted to "The Pathogenesis of the Early Stage," the third session, "Management of the Early Stage," the fourth session, "The Convalescent Stage." There were ten sessions. James L. Wilson, M.D., of Ann Arbor, and Joseph G. Molner, M.D., of the Detroit Board of Health, were speakers, and Paul G. Wooley, Jr., M.D., of Children's Hospital, Detroit, was one of the panel members. The conference was held in New York City, July 12-17, 1948. Every paper and all the discussions are presented here, making a valuable record as well as giving a vast amount of information.

MANUAL OF MEDICAL EMERGENCIES. By Stuart C. Cullen, M.D., Professor of Surgery; Chairman, Division of Anesthesiology, State University of Iowa College of Medicine and E. G. Gross, M.D., Professor and Head of Department of Pharmacology State University of Iowa College of Medicine. Chicago: The Year Book Publishers, Inc., 1949. Price \$3.75.

This is a very interesting and useful book, giving in fair detail the things to do in emergencies. A lot of ground is covered. The book is devoted principally to the general practitioner and his needs, as he is most

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likely to be called in an emergency. A few items described are airway and artificial respiration, circulatory emergencies in sudden cardiac arrest, coronary occlusion, shock, acute poisoning, head injuries, serum disease, asthma, acute coma, burns, sunstroke, etc. The method of treatment is carefully given. It will make a very useful book, small enough to be carried in a pocket.

MEDICAL ETYMOLOGY—The History and Derivation of Medical Terms for Students of Medicine, Dentistry, and Nursing: By O. H. Perry Pepper, M.D., Professor of Medicine, University of Pennsylvania. 263 pages. Philadelphia and London: W. B. Saunders Company, 1949. Price \$5.50.

Medical, dental, and nursing terminology is a new and strange language for the average student. In past years knowledge of Latin and Greek was considered a prerequisite for the study of medicine, and some knowledge of the classical terms was more or less universal in students of the medical sciences. Of late years much less Latin knowledge is required and no Greek. The new terms are almost unintelligible. This book gives a history of the growth of scientific words, their meaning and use. Every word is given its derivation, and structure, and a good definition. Words are also grouped under the department or section of medicine where they will most likely be encountered first. There is also a general index.

ORAL AND DENTAL DIAGNOSIS—With Suggestions for Treatment: By Kurt H. Thoma, D.M.D., F.D.S.R.C.S. Eng., Professor of Oral Surgery, Emeritus, and Brackett Professor of Oral Pathology, Harvard University. With Contributions by Henry Goldman, D.M.D., Head of the Dental Department, Beth Israel Hospital, Boston; Fred Trevor, D.M.D., Formerly Instructor in Oral Pathology, Harvard Dental School. New, 3rd edition. 563 pages with 776 illustrations, 60 in color. Philadelphia and London: W. B. Saunders Company, 1949. Price \$9.50.

This third edition is almost completely rewritten or rearranged. The emphasis is still diagnosis, but modern and new methods are used, to make the text more exact and authoritative. Much new material is given with discussion of the benefits. Fluorides are mentioned as a prophylactic, and the technique given. The fractures of maxillary, nasal, facial, bones are accurately described with the accepted treatment. Techniques of history taking demand a chapter, and are well presented. The book will fill a needed place in the busy dentist or oral surgeon's library.

ATLAS OF ROENTGENOGRAPHIC POSITIONS. By Vinita Merrill, while Educational Director, Picker X-Ray Corporation. In two volumes. C. V. Mosby Co., 1949. Price \$30.00.

These two volumes have been arranged in an orderly manner. The illustrations and reproductions are concise and clear. The anatomy is sufficiently detailed for the technician's use, yet not so detailed as to be misleading. There is no conceivable radiological position which has not been included, and the photographs illustrating the placing of the patient are well conceived and self-explanatory. No attempt has been made to give technical factors and this, I believe, is a wise move.

Such a set of books will be excellent as an aid in teaching technicians and physicians a variety of methods for obtaining information radiographically about a given portion of the body. An excellent bibliography is included. Volume 1 contains the glossary, and both volumes carry their own index.

G.T.P.

PHYSICIANS' DESK REFERENCE To Pharmaceutical Specialties and Biologicals. In Four Sections. J. Morgan Jones, Editor and Publisher. Rutherford, N. J.: Medical Economics, Inc., 1948.

The book is printed in four colored paper sections. The first (pink) is an alphabetical index; second (yellow) Drug and Pharmaceutical Index; third (blue) Therapeutic Indications Index; fourth (white) Div. A—Professional Products Information, Div. B—General Professional Information. The book is a handy reference to the innumerable pharmaceuticals and biologics available for the use of the busy doctor. It is published yearly in December and is distributed free to 130,000 doctors, and 3,500 hospitals with over fifty beds.

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AUGUST, 1949

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1077

REMEMBER NOVEMBER 2ND?

That "wonderful feeling" that all will turn out right on Capitol Hill is bound to produce the same type of hangover many of us had on the morning of November 3. Don't think for a minute that our opposition is going to silently fold up its tents and filter back into the offices of the Federal Security Administration without putting up a fight. This is all-out war to the bitter end, and if you feel that we have made any gains, let's consolidate them and forge ahead to lick this "cradle to grave" philosophy once and for all.—From the *P.R. Reporter* of the Pennsylvania State Medical Society.

BANANAS AS A HEALTH FOOD

The use of powdered banana as added carbohydrate in the milk formula is widely advocated for both well and sick infants. Mashed, sieved pulp may be fed separately in amounts varying from one teaspoonful to a whole banana daily. The banana formula because of its thickness is not likely to be vomited. It is hence well adapted to being given in small amounts at frequent intervals to infants who are weak, without appetite and fail to make satisfactory gains in weight. It is particularly useful in premature and malnourished babies who cannot digest most fruit juices. One authority found that when the pulp was fed separately from the milk formula, the more underweight the infants were the greater the average weight gain. Those more than fifteen per cent underweight made average gains of 4.2 ounces weekly, which is more than that made by normal infants. Children with scurvy were cured with no other remedy than two sieved bananas daily.—*Good Health*, January, 1949.

FINDINGS OF HOOVER TASK FORCE

The Hoover task force found that no agency considered the other as existing at all. In Honolulu, the Army had just opened a new 1,500-bed hospital despite the fact that an adjacent Navy hospital was more than adequate to care for all servicemen in the area. In still another instance, the Veterans Administration was letting bids for a hospital to be built right next door to a Navy hospital only 10 per cent occupied by Navy patients. Senseless duplication of physical facilities, waste of scarce medical personnel and a general lack of integration were apparent in every area surveyed by the investigators.

As a result of the findings of its task force, the Hoover report recommended a unified medical administration over the large-scale activities of the Federal government in the fields of medical care, medical research and public health.—*Insurance Economic Surveys*, July, 1949.

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UNIVERSITY HOSPITAL RESIDENT, Ann Arbor, Michigan, desires locum-tenens during September, 1949. For particulars please contact K. Paul Hones, M.D., 602 Fifth Street, Ann Arbor, Michigan.

U. S. BECOMING WELFARE STATE, BYRNES FEARS

Former State Secretary James F. Byrnes said here today that some of the suggested new Federal programs "point inevitably to a welfare state. We are going down the road to stateism," he said. "Where we will wind up no one can tell. But if some of the new programs seriously proposed should be adopted, there is danger that the individual—whether farmer, worker, manufacturer, lawyer, or doctor—will soon be an economic slave pulling an oar in the galley of the state."

The former Cabinet member said: "Too many people are trying to transfer power to the government. We are not only transferring too much power from the individual to the government, but we are transferring too many powers of state governments to the federal government."—*Chicago Tribune*, June 19, 1949.

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of the Michigan State Medical Society

VOLUME 48

SEPTEMBER, 1949

NUMBER 9

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Copyright, 1949, by Michigan State Medical Society

Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 4, Minnesota. Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, \$5.00; single copies, 50 cents. Additional postage: Canada, \$1.00 per year; Pan-American Union, \$2.50 per year; Foreign, \$2.50 per year.

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(Continued on Page 1090)

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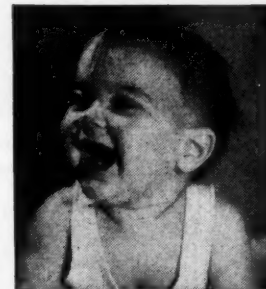
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HIGHLIGHTS OF THE MID-SUMMER SESSION OF THE COUNCIL

July 7-8-9, 1949

- Monthly financial reports and bills payable were presented by A. S. Brunk, M.D., and approved.
- The report of the Treasurer, plus the semi-annual authenticated report on MSMS bonds, was presented by A. S. Brunk, M.D., and approved. The sale of bonds requisite to purchase a building to house the Michigan State Medical Society offices, provided present negotiations are satisfactorily consummated, was authorized.
- Committee reports were accepted from the Iodized Salt Committee, from the Rheumatic Fever Control Committee including progress report of Director Leon DeVel, M.D., and from the Special Committee on Education.
- The Michigan Health Council's proposed study of health resources and needs was presented, thoroughly discussed, and approved.
- Progress report on the Survey of Rural Health Needs, sponsored by Michigan State College—Michigan State Medical Society—Michigan Foundation for Medical and Health Education, was presented by the Public Relations Counsel.
- The minutes of The Council's Standing Committees (Publication, County Societies, and Finance) were presented and action taken on the individual items.
- A joint meeting with members of the Michigan State Board of Registration in Medicine was held to discuss changes in the Medical Practice Act, and the possibility of an annual re-registration bill. An MSMS Committee, to meet jointly with a committee of the Michigan State Board of Registration in Medicine to study proposed recommended amendments to the Act, was authorized and appointed (P. L. Ledwidge, M.D., Detroit, Chairman, J. D. Miller, M.D., Grand Rapids, and E. F. Sladek, M.D., Traverse City).
- The Annual Report of The Council was read, corrected in several sections, approved, and referred to the House of Delegates.
- The annual joint meeting with the State Advisory Council of Health was held and mutual problems were discussed.
- The monthly progress reports of the President, the President-Elect, the Secretary, the Editor, the General Counsel, and the Public Relations Counsel were presented and accepted.
- Ubiquitous Hosts and Discussion Conference Leaders for the 1949 MSMS Annual Session were appointed.
- The Council invited all county medical societies, which have not appointed Mediation Committees to date, to do so at the earliest possible date.
- Annual Reports of all MSMS Committees were referred to the House of Delegates (to be printed in the Handbook for Delegates).
- The Council authorized the appointment of a sub-committee of the MSMS Child Welfare Committee to aid in the program of hearing conservation, upon request of the Bureau of Child Welfare of the State Department of Health.
- The Constitution and By-Laws of the newly formed Michigan Medical Assistants Society were approved, after study of and recommendation by the General Counsel.
- A Committee of The Council was appointed to carry on co-operation and investigation with representatives of labor, industry, small business and farm groups concerning health insurance plans (P. L. Ledwidge, M.D., Detroit, Chairman, A. S. Brunk, M.D., Detroit, L. Fernald Foster, M.D., Bay City, and O. O. Beck, M.D., Birmingham, Ex-officio).
- After a preview of the new MSMS movie "To Your Health," The Council voted approval of same and congratulated and thanked the Sub-Committee on Cinema of the Public Relations Committee for developing this excellent motion picture.
- The annual joint meeting with members of the Michigan Crippled Children Commission resulted in a discussion of five items including revised fee schedules of the Commission and the legal provision that payment to physicians is

(Continued on Page 1094)

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1092)

governed by the 60-day billing clause—and that doctors are penalized by the loss of their fees for failing to bill promptly; further that the statutes limit payment to doctors of medicine for medical services rendered only in approved hospitals (of which there are 126 in Michigan).

COMMITTEE OF THE NATIONAL ACADEMY OF SCIENCES OF THE INVESTIGATION OF CORTISONE

The recent publication by Hench, Kendall, Slocumb, and Polley of the dramatic effectiveness of the adrenal cortical steroid, Cortisone (first isolated by E. C. Kendall), in the treatment of rheumatoid arthritis has posed an important problem of distributing the very limited amount of that substance which will be obtainable during the remainder of this year. Originally obtained from the cortex of the adrenal gland, it is now being prepared synthetically from a bile acid. While the value of Cortisone in controlling the symptoms of rheumatoid arthritis is regarded as established, much remains to be learned concerning its possible untoward effects, its usefulness in other diseases and the mechanism of its action. It has been decided, therefore, that the small amount which can be made during the last five months of 1949 shall be used only for clinical and experimental research. It will be made available to those investigators who are in the best position to provide the information vitally needed to insure its safe and effective use.

The Research Corporation, a non-profit organization which administers patents in the interest of public welfare and for the furtherance of scientific research, has aided in the development of the synthetic processes for making Cortisone. The Corporation will continue to further the development of these processes and to stimulate research on the mechanisms of action of the Compound. In fulfilling these functions, the Research Corporation has requested the President of the National Academy of Sciences to appoint a Committee on Investigation of Cortisone, with assurance that its recommendations will be accepted as final with respect to all of the available 1949 supply.

The membership of the committee, appointed with the sanction of the Council of the Academy, is as follows: Chester S. Keefer, chairman, Hans T. Clarke, E. A. Doisy, Robert F. Loeb, C. N. H. Long, E. K. Marshall, Jr., Joseph T. Wearn. David E. Price has been appointed by the Acting Surgeon General to act as liaison between the committee and the U. S. Public Health Service.

The committee is planning arrangements designed to utilize to the fullest possible extent the resources of the National Research Council and the information and advice of experienced and competent investigators in the United States and Canada. Not only will the fields of rheumatism and other diseases for which relief may be anticipated continue to be investigated, but also fields of

physiology and pharmacology which are basic to fuller understanding and further advance.

While the Academy has no funds with which to buy Cortisone or to support investigations, it is confidently expected that the needed funds will become available from both public and private sources.

The Academy committee has accepted this responsibility because of the deep conviction that a new discovery of the greatest importance to the health and welfare of countless people has been made and that it is vital to promote its most rapid and intelligent development.

Applications for a supply of Cortisone must be submitted on a form that can be obtained from the chairman of the committee, Dr. Chester S. Keefer, 2101 Constitution Avenue, Washington 25, D. C. It must be emphasized that consideration will only be given to requests from institutions where adequate facilities for investigation and clinical control are available.

SHORT TERM DUTY AVAILABLE FOR ARMY MEDICAL RESERVISTS

The Department of the Army has just published Special Regulation 140-210-10, which authorizes commanders of Army installations to place volunteer reserve officers of the Medical, Dental, and Veterinary Corps on active duty for periods of from one to twenty-nine days a month, but not more than ninety days of active duty in a fiscal year. Officers selected will be placed on active duty in the grade in which currently commissioned in the Officers' Reserve Corps.

Publication of the new regulation is a result of the encouraging response to questionnaires mailed to reservists last May in a nation-wide survey conducted by Major General R. W. Bliss, the Surgeon General of the Army, asking physicians, dentists, and veterinarians if they would be available for short tours of duty to help relieve the critical shortage of these professional personnel. Approximately 2,000 favorable replies have been received as of June 30.

Active duty will be performed at an Army installation or activity situated within the vicinity of the officer's home. No officer will be ordered to active duty where travel to duty station is involved. However, authorization whereby officers may volunteer as ship's surgeon on an Army transport for a round-trip voyage is given in the regulations.

Names of officers who have indicated a willingness to serve have been mailed to the senior Army instructor, Organized Reserve Corps, in the state of residence, who will mail application blanks and copies of the regulations to each officer concerned. Completed forms will be returned to the senior instructors for action.

Many concrete suggestions by reserve officers were received with the returned questionnaires. A plan which may solve the inadequate staffing of transports was submitted by twenty reserve medical officers who propose to man medical installations in the New Orleans area on a staggered schedule, including filling the job of ship's surgeon on Army transports using New Orleans as a port of embarkation. An effort is being made to have the plan generally adopted.

Specially Priced for
Month of October:

HARTZ
SALATIN

TABLETS

(white, pink or green)

FORMULA

Aspirin4 Grains
Phenacetin2 grains
Caffeine Alkaloid1/4 grain

The J. F. HARTZ Company
1529 Broadway, Detroit 26, Mich.

TEAR OUT AND MAIL THIS CONVENIENT ORDER BLANK

The J. F. HARTZ CO., 1529 Broadway, Detroit 26, Michigan

Please Send Me the Following Supplies IMMEDIATELY

QUANTITY	ARTICLE
	SALATIN

Name

Address City

Cancer Comment

CANCER EDUCATION

In spite of the vast quantities and diversity of material that have been produced for lay education in the field of cancer control, there are still but two fundamental objectives to this program: (1) to tell the public that the great majority of early cancers are curable when treated properly, and, (2) to encourage periodic examinations.

There is little else to the cancer control story. Professional and lay efforts should be directed to this truth simply and effectively emphasized and re-emphasized until every physician, dentist, nurse and intelligent layman comes to accept it as the corner stone of cancer control.

Telling this simple truth once may have but little effect. Like all other educational efforts it must be repeated over and over in order to plant it firmly in both lay and professional minds. The telling of this story should utilize a far greater share of available cancer funds than is now the case. It has been well said that "we can't spend too much money telling that early cancer is curable in the majority of cases. This is the only way that we can cut down the mortality from cancer at the present time."

Methods will vary; media may change; but no matter how elaborate the program or profuse the materials used, a few simple facts that everyone should *know* about cancer and a few simple things that everyone should *do* to protect himself constitute the layman's chief weapons against this menace. Everyone should know that:

1. Cancer is an abnormal growth of body cells
2. Cancer is neither contagious nor hereditary
3. In many cases, cancer is curable
4. Surgery, x-rays and radium are the only recognized methods of treatment

Having learned these simple facts about cancer, everyone should:—

1. Be examined at periodic intervals by his own physician so that cancer, when present, may be found in the early and curable stage and the patient placed under prompt and proper treatment. This applies particularly to men and women after age thirty-five or forty.
2. Learn the following signs of early cancer and,

when recognized in himself, seek prompt medical attention:

- (a) A single painless lump in the breast
- (b) Unnatural bloodstained discharges from natural body openings
- (c) Sores that do not heal promptly
- (d) Persistent indigestion
- (e) Sudden changes in size, shape or color of moles or warts
- (f) Persistent hoarseness
- (g) Changes in bowel habit

It takes just two persons to control cancer: the patient and his physician. *What* these two do and *when* they do it will determine the outcome of each case. Once the patient places himself in the hands of his physician, his remaining contribution to his own welfare is to co-operate fully in all procedures that may be indicated. With such co-operation, the major responsibility then lies with the physician in charge of the case.

Physicians can do effective lay education in their daily contact with patients by stressing the facts presented above and especially by offering periodic examinations to detect cancer in its early stages. The Hillsdale Plan for Tumor Detection has demonstrated its educational value to the physicians and the community as well as protection to the one examined.


In many areas, emphasis and funds have been centered on personal service to the cancer patient more than on the educational program. Desirable as many of these services are, they offer little or no help in reducing the future need for them. Only education of the public to guard against the development of cancer and its recognition in early stages will eventually lessen the demand for such services.

It is wise leadership that keeps the fundamental needs of cancer education always in view and does not dissipate time, energy or funds in non-productive efforts that lead into blind alleys of little personal or community benefit.

PROGRAM FOR FIRST MICHIGAN CANCER CONFERENCE COMPLETE

The program for the first Michigan Cancer Conference to be held at the Hotel Olds, Lansing, on October 11, 1949, is virtually complete.

(Continued on Page 1098)



Essential food factors

Several decades ago, vitamins, minerals, and other noncaloric but useful components of the diet were known as "accessory food factors." Today, it is recognized that these *accessory factors* are in fact *essential factors*.

Hypernutrition aids the recovery process and tends to hasten tissue repair. Vitamin A, vitamin D, thiamine (B₁), riboflavin (B₂), niacinamide, ascorbic acid (C) and folic acid have enjoyed wide usage for convalescent and reparative states.

Lederle has consistently advocated such use of the vitamins.

Lederle

LABORATORIES DIVISION

AMERICAN *Cyanamid* COMPANY
30 ROCKEFELLER PLAZA
NEW YORK 20, N.Y.

PROGRAM FOR FIRST MICHIGAN CANCER CONFERENCE COMPLETE

(Continued from Page 1096)

Registration will be from 10:00 to 10:30 a.m. The program will begin promptly at 10:30 with Norman F. Miller, M.D., Chairman, Cancer Control Committee, Michigan State Medical Society, Presiding. The morning session will have five short talks as follows:

A. E. Heustis, M.D., Commissioner, Michigan Department of Health, will speak on "The Cancer Problem in Michigan."

A. A. Humphrey, M.D., Battle Creek, member of the Cancer Control Committee, will report on "Programs for Early Detection of Cancer."

A. W. Strom, M.D., Hillsdale, will describe "The Hillsdale Plan in Action."

Mr. Don Johnson, Flint, Past President, Michigan Division, American Cancer Society, will discuss "The Layman's Interest in Cancer."

Norman F. Miller, M.D., will propose a "State-wide Cancer Control Program."

During luncheon, questions will be invited on the morning talks and related cancer problems in Michigan. It is expected the meeting will adjourn by early afternoon.

It is hoped that each county medical society will be represented by its officers and cancer committee chairman.

POTPOURRI

The making of every physician's office a cancer detection unit, exemplified by The Hillsdale Plan for Tumor Detection, is spreading rapidly to other states. The Cancer Control Committee receives frequent inquiries about this Plan from widely separated parts of the country. This program brings the detection of cancer into the office of the family physician and arouses an added interest in the subject by the great mass of the medical profession.

Various methods are being employed to satisfy this interest. Michigan physicians are well aware of the Michigan Cancer Bulletin which has been going to them regularly for the past three years. Volume II of this Bulletin lays particular stress on differential diagnosis of cancer in various sites.

Cancer teaching days, of which the annual Cancer Day in Flint is an outstanding example, are held under local medical auspices in many parts of the state.

A refresher course held at the University Hospital last January, for which twice as many applications were received as could be admitted, will be repeated during this next school year.

The Cancer Day program following the annual meeting of the Michigan State Medical Society in Grand Rapids in September promises to contribute materially to the family physician's ability to recognize cancer in his own patients.

In Denver, Colorado, each July, physicians to the number of 700 from the adjacent area gather for a two-day cancer education program given by scientists of national prominence.

In Tennessee, a physician with several years' postgraduate training in cancer diagnosis and treatment is devoting his full time over a three-year period to teaching local medical groups about the newer developments in the cancer field.

The above are some, but by no means all, the ways being employed to increase the physician's awareness of the rapid developments in the cancer field.

* * *

Statewide interest in the periodic medical examination to detect cancer in early stages has caused the Cancer Control Committee to call the First Michigan Cancer Conference to discuss the Hillsdale Plan and its application to all counties in the state. The program appears in the preceding column. Enough responses have been received from statewide organizations interested in health to insure a successful meeting. In holding this meeting, Michigan physicians are giving another demonstration of their constructive interest in the health problems of their communities.

* * *

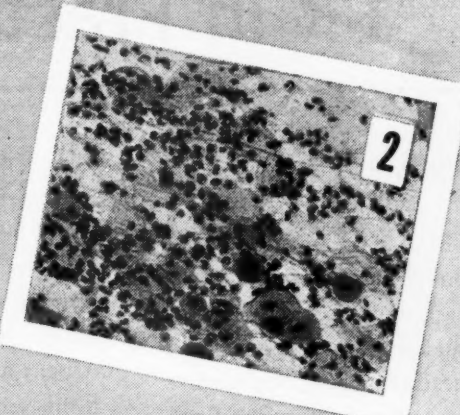
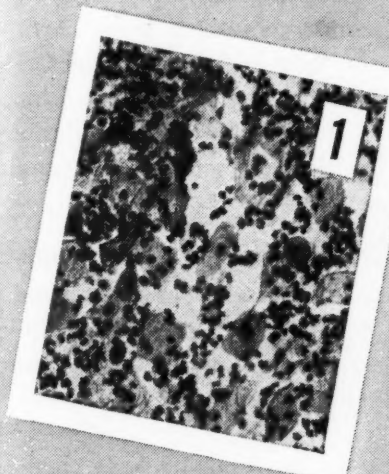
From latest reports, the 1949 goal of more than \$14,000,000.00 set up by the American Cancer Society has been oversubscribed in many states. Forty per cent of the amount collected is sent to the national headquarters of the society. States use their 60 per cent in different ways. In Michigan, 50 per cent of the funds are spent in the county where collected under direction of a local program planning committee. There is medical representation on each county committee, so physicians have a responsibility in seeing that the local program contributes in the largest possible way to solution of the cancer problem.

As education of all groups of high school age and over offers the greatest hope for ultimately

(Continued on Page 1102)

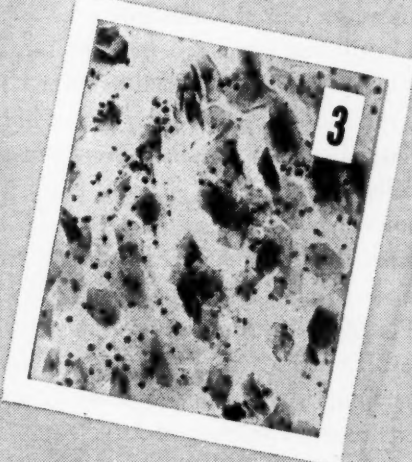
Untreated menopause. Epithelial cells are relatively small, large nuclei predominate; bacteria, leukocytes, free-floating nuclei and other debris cloud the smear picture.

1

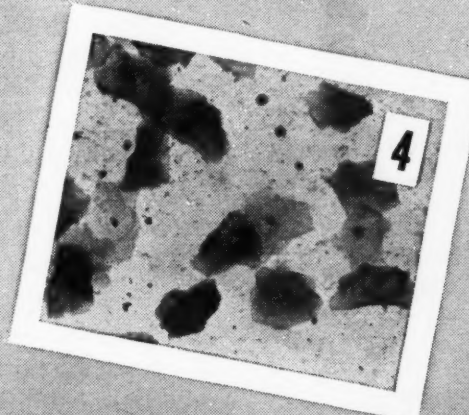


2

2 & 3 Smears showing progressive improvement during estrogen treatment. The picture is beginning to clear. The cells are enlarging and becoming more discrete.



3



4

4 Smear showing effects of full estrogen replacement. The smear is clean and free of leukocytes indicating restoration of a normal vaginal epithelium.



CONESTRON®

ESTROGENIC
SUBSTANCES
WATER SOLUBLE

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ESTROGENS
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For action with little or no side action in control of menopause and certain other ovarian disorders.

CONESTRON, a complex of estrone, estradiol, equilin, equilenin and hippulin in the physiological conjugate obtained from the pregnant mare, supplies estrogens from natural sources, in the original, orally active form.

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Tablets of 0.625 and 1.25 mg., expressed as estrone sulfate. Bottles of 100 and 1000.



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PR In Practice

MSMS Speakers Conference Provides Another Step Forward

Under the direction of Paul R. Bagwell, one of the nation's outstanding public speakers and Professor of Spoken English at Michigan State College, the first MSMS Speakers Conference held in Grand Rapids on Thursday night, September 22, proved to be another step forward in the fight against socialized medicine.

Conducted as one of the educational features of the 84th MSMS Annual Session, the Clinic attracted more than 150 physicians and their friends for the five and one-half hour period. The Conference opened at 5:00 with a didactic program, followed by dinner at 7:30. Following the dinner session the members reassembled for a two-hour period of laboratory speech examination.

The MSMS Speakers Conference was born as a result of repeated requests from many Michigan physicians for the opportunity to learn the rudiments and techniques of effective platform speaking and how to make a Speaker's Bureau effective locally. Under Professor Bagwell's capable direction this initial gathering provided an excellent occasion for learning speech preparation and delivery preparatory to renewed vocal efforts against socialized medicine requisite next autumn and winter.

Much of the credit for the success of the conference goes to L. Fernald Foster, M.D., MSMS Secretary, who functioned as chairman for the evening's activities.

Development of Local Speech Conferences Urged

The success of the recent statewide Speakers Conference has resulted in a demand for like meetings in local medical society areas, according to L. W. Hull, M.D., Chairman of the MSMS Special Committee on Education.

"The intensified CAP activity that will of necessity come with the autumn months indicates that every county medical society should do all in its power to train and develop capable public speakers," Dr. Hull said. "The pattern established by Professor Paul Bagwell, Director of the meeting on September 22, could well be followed in nearly

all our component groups. Each should plan a Speakers Conference for an evening and invite the aid of those prominent speakers in the community, whether professional or lay, in the preparation of and conduct of the school. Arm your members with the facts and the principles of good platform appearance and presentation. Once this is done you have laid the proper foundations for an extremely active, effective and profitable speakers bureau."

MSMS Socialized Medicine Movie Completed

Michigan State Medical Society's second motion picture, "To Your Health," has been completed and at present has started its run in many of the 400 commercial theaters in Michigan. "To Your Health" is a ten-minute film depicting some of the pitfalls of socialized medicine and according to preview audiences is one of the most potent weapons yet devised in this fight.

"To Your Health" was produced by the Jam Handy Organization, producers of the first MSMS film "Lucky Junior" which today is still being shown in theaters throughout the nation. Medical supervision of both scripts has been supervised by the MSMS Cinema Committee under the Chairmanship of Arch Walls, M.D., Detroit.

Copies of the new film in 16 mm. size are available for showing to county medical societies. Orders for the picture should be addressed to the MSMS office, 2020 Olds Tower Building, Lansing 8, Michigan.

New Jersey Joins States Using "Tell Me, Doctor"

The parade of States using the popular "Tell Me, Doctor" radio series developed by the Michigan State Medical Society continues; the state of New Jersey is the latest to join the ranks. Through its Executive Officer, James E. Bryan, the Medical Society of New Jersey has requested all pertinent information regarding the program and within a short time will be airing the five-minute healthcast.

The Oklahoma State Medical Association has recently reordered the series while a new twist is being used by the Tompkins County Medical So-

(Continued on Page 1102)

30-DAY TEST REVEALED

*“Not one single case of
throat irritation due to
smoking CAMELS!”*



Yes, that's what throat specialists reported after making weekly examinations of the throats of hundreds of men and women from coast to coast who smoked Camels, and only Camels, for 30 consecutive days.



R. J. Bernolds
Tobacco Co.,
Winston-Salem,
N. C.

According to a Nationwide survey:

*More Doctors Smoke CAMELS
than any other cigarette*

Doctors smoke for pleasure, too! When three leading independent research organizations asked 113,597 doctors what cigarette they smoked, the brand named most was Camel!

SEPTEMBER, 1949

Say you saw it in the Journal of the Michigan State Medical Society

1101

New Jersey Joins States Using "Tell Me, Doctor"

(Continued from Page 1100)

ciety, Ithaca, New York. This organization has requested use of the scripts rather than the recordings and will take to the air with members of their local medical society in the cast supplemented by local radio talent.

MSMS Members Meet Congressional Climaxes in Full Stride

The climactic activities of the 83rd Congress have resulted in numerous appeals to members of the MSMS for action respecting pending bills and amendments. The result of these urgent appeals is contained in a message of thanks from O. O. Beck, M.D., Chairman of The Council who says "We are truly grateful to all of you who responded so well when we asked for action on certain bills in Washington. We particularly appreciate the telegrams relative to the President's Reorganization Plan Number One and for all your efforts in regard to H.R. 2893, a measure which would have brought all self-employed into the Social Security taxing system. With teamwork like this there is no doubt but what we can continue to keep American medicine unfettered and the finest in the world."

Woman's Auxiliary Program Stimulated Through Summer Bulletin

The excellent activity of the Woman's Auxiliary to the Michigan State Medical Society was further emphasized during the past three months through publication of a monthly Bulletin. The four-page booklet, prepared by the MSMS Public Relations Department, under the direction of Mrs. Robert S. Breakey, Auxiliary Public Relations Chairman, was mailed to each member of the Auxiliary.

Editorial contents of the Auxiliary organ were directed towards the part the doctor's wife can play in the CAP program. Emphasis was placed on those activities being carried out by various groups throughout the state and to those plans made by other groups for future work. Additionally the Bulletin carried news notes and ideas from successful education programs in other states. The third issue contained a comprehensive chart outlining the year-round accomplishments of each Auxiliary in the various fields of endeavor entered by the state and local groups.

Socialized Medicine Material Ordered Is Indication of Individual Activity

A fairly accurate barometer of the individual activity in the CAP program is the extent to which individual physicians re-order materials from the supplies available from both MSMS and the AMA. Reports are being received daily telling of new and different uses for the various posters, pamphlets, and stickers.

How are you aiding in the education of your patients and friends through printed materials? How is your present stock of supplies? Please order from the following list any quantity you feel you can profitably use:

Number 17—"Government Medicine in New Zealand"—Its social, economic and political implications.

Number 18—"Compulsory Health Insurance"—this is the first of the AMA series and is much like the valuable "Uncle Sam, M.D."

Number 24—"The Voluntary Way is the American Way"—Fifty questions and answers.

Number 25—"Your Medical Program—Compulsory or Voluntary?"—A comparison of compulsory and voluntary health insurance.

Stickers—Colorful gummed labels for use on stationary, et cetera. This method of message carrying is particularly liked by many doctors.

CANCER COMMENT

Potpourri

(Continued from Page 1098)

controlling cancer, such programs should be emphasized as of primary importance in all local projects for the use of cancer funds. People must learn the facts about cancer and what the individual can and must do to protect himself. There is no other approach to a solution of this problem except through a great extended and intensified educational program.

* * *

Almost daily, newspapers report tests for cancer for which simplicity and unwarranted accuracy are claimed by their originators. New and unproved methods of treatment are also exploited through the same media. All this disservice to humanity is further complicated by the willingness of some physicians to exploit these announcements as being of accepted value in the diagnosis and treatment of malignant disease.

In such instances the restraining hand of the Committees on Ethics should be applied in no uncertain manner. Cancer is too serious a problem to be cruelly exploited by those who are physicians in name only.

delayed diagnosis is enemy number one of **DIABETICS**

A million or more diabetics are undetected and untreated.† But only about 55,000 new cases are being discovered each year in the course of insurance examinations and routine checkups. Early diagnosis and prompt treatment give the physician his best opportunity to ameliorate the disease and to avert or delay its complications.

An urgent problem

How shall the unknown diabetic be detected and directed to the doctor's office for diagnosis and proper treatment?

An important answer AMES Selftester*

**a quick home screening test that brings
those with glycosuria to you for diagnosis**

The Ames Selftester for detection of sugar in urine is approved by the Council of the American Diabetes Association. It is a simple, reliable screening test to establish the presence or absence of urine-sugar and "refer" those with glycosuria to you for diagnosis.

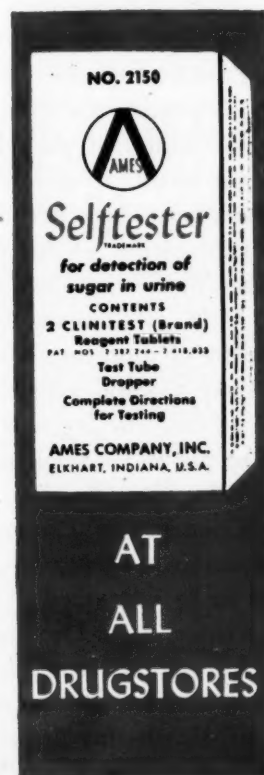
The directions state:

- 1. The Selftester does not diagnose diabetes or any other disease.** Its sole function is the detection of sugar (glucose) or sugar-like substances.
- 2. If reaction is positive, see your doctor at once.** Sugar in your urine does not necessarily mean you have diabetes (nor does a negative result definitely exclude the presence of disease). But only your doctor, by medical examination and by additional laboratory tests, can tell you why you show sugar.

† Wilkerson, H. L. C. and Ktall, L. P.: Diabetes in a New England Town, Journal of the American Medical Association, 135:209 (Sept. 27) 1947.

* Ames Selftester—TRADE MARK

AMES COMPANY, INC. • ELKHART, INDIANA



Highlights from Under the Bushel

By L. W. Hull, M.D.

Chairman, Special Committee On Education

EDITORIAL BOUQUETS TO:

James J. Lightbody, M.D., Energetic new President of the Wayne County Medical Society who deserves rich praise for his two guest appearances at recent Detroit meetings of the Detroit Optimist Club and Kiwanis No. 1 . . . reports indicate his speeches were well received and remembered . . . credit also to C. L. Candler, M.D., of Detroit for his activity in connection with both veterans and service clubs . . . Many additional resolutions have been received in the MSMS office testifying to continued activity on the part of all in the CAP program . . . J. W. Evers, M.D., of Flint continues to add names to his list of "20"—are you? . . . Councilor C. A. Paukstis, M.D., did yeoman work in organizing doctors and their wives in the Ludington area for combat against President Truman's Reorganization Plan Number One—Our hat is off to you . . . Otto Vandervelde, M.D., President of the Ottawa County Medical Society, is putting his spare time to good use: he distributes copies of pamphlets to friends as he travels the streets to and from his office . . . also slips them into the seats of all parked cars . . . Another physician working closely with dentists and other professional groups is Councilor E. A. Oakes, M.D. of Manistee . . . Another idea for distributing of literature comes from M. A. Hoffs, M.D., Lake Odessa, who has overcome a natural apathy by constructing a box for use in his office—in it he places his small pamphlets and the Box reads "Take One, Free" . . . Congratulations to Wayne County CAP Committee for its attractive and informative weekly hospital bulletin—enables Doctors to be contacted at a point of great professional interest . . . Dual honors to Dr. and Mrs. A. B. Aldrich of Houghton for their inspired leadership and activity—at present they are taking charge of distributing literature to all drug stores in their area . . . Dr. Scott Moore of Niles is hard at work interesting employers in placing pamphlets in their pay envelopes . . . Single out young E. S. Oldham, M. D., of Breckenridge for his efforts in sparking the work in Clare-Gratiot-Isabella Counties—he and his fellow workers have big plans

for the fall . . . the perennial CAP enthusiast Hugo Aach, M.D., of Kalamazoo has come through again with the placing of the large Fildes poster in local bank lobbies and railroad stations . . . Although he was a patient in one of Muskegon's hospitals, R. J. Douglas, M.D., still followed through with several ideas regarding legislative action—it's hard to keep a good man down . . . The physicians of St. Joseph County led by Sam A. Fiegel, M.D. as President, are doing a commendable job in community relations . . . held a recent meeting for community leaders and secured enthusiastic pledge of aid for future efforts . . . Many others are still hard at work keeping up the fight against socialized medicine—and the fight has only begun—the new session of congress will see renewed attempts to destroy all you have labored so long and diligently for . . . Tell us about your plans to win this battle and we'll tell readers of THE JOURNAL.

L. W. HULL, M.D., *Chairman*
Special Committee on Education

Care should be taken to avoid sentimental or emotional appeals for money or interest in cancer. Such appeals soon become stale and are, therefore, ineffective.

* * *

Cancer can no more be controlled by sentiment than a given case of cancer can be cured by love and good wishes.

* * *

A deeper knowledge of cancer, far from accentuating the fear inspired by this disease, is the best means of allaying it.

* * *

Sixty per cent of cancers in the human body can be recognized by a physician in an office examination.

* * *

Youth does not preclude the presence of carcinoma of the colon.

* * *

A rectal proctoscopic and sigmoidoscopic examination should be as much a part of the routine of a physical examination at any age as an inspection of the nose and throat or taking a blood pressure reading.

From birth to the end of the bottle-feeding period



BAKER'S MODIFIED MILK

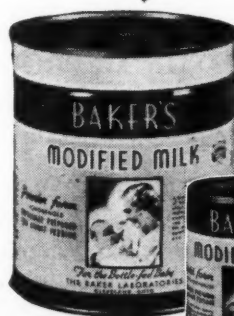
*—well tolerated by both pre-
mature and full-term infants*

YOU will be pleased by the highly satisfactory growth, firm muscle tone and tissue turgor when you prescribe Baker's Modified Milk, because Baker's is a highly nutritious food complete (except for Vitamin C) for infants from birth throughout the bottle-feeding period.

Closely conforming to human milk, Baker's is well tolerated by both premature and full-term infants. No change in formula is required as the baby grows older—just increase the quantity of feeding.

These are qualities making Baker's Modified Milk a fast-growing favorite among doctors. Obstetrical department personnel and mothers are especially pleased when Baker's is prescribed, because Baker's requires no complicated feeding directions. For normal feeding strength, merely dilute liquid Baker's with equal parts of boiled water.

Just leave instructions with the obstetrical supervisor at the hospital. She will be glad to put your bottle-fed babies on Baker's.



POWDER



LIQUID

Baker's Modified Milk is supplied as powder or liquid. Both forms may be fed interchangeably to meet individual requirements.

BAKER'S MODIFIED MILK

THE BAKER LABORATORIES INC., Cleveland, Ohio

Division Offices: San Francisco, Los Angeles, Denver, Seattle and Greensboro, N. C.



Editorial Comment

"UNNECESSARY HUMAN SUFFERING"

In his three thousand word report, President Truman *re* his ten-year health program stressed compulsory health insurance and indicated that this is necessary to end "unnecessary human suffering."

Even an intelligent layman knows that much of the total load of human suffering is psychological and not in any way connected with physical ills—not amenable to medical care.

Particularly should the layman who has reached the highest office within the reach of the United States citizen be able to appreciate the psychological strain placed upon the citizenry by a profligate government moving toward totalitarian policies with taxes already ten per cent higher than the limit for survival.

The people endowed with average intelligence know that the quickest and surest way to lighten the heavy load of "unnecessary human suffering" is to end the New Deal.

A check of the Federal government's present medical load would show that the mounting neuropsychiatric phase has long since outstripped the physical. In this country we have moved along with our so-called civilization only to find that sniping bureaucrats are much harder on the nerves than mauling Indians.

How healthful and how helpful it would be if Mr. Truman would show some disposition to clean house and cut costs.—Editorial, *Journal Oklahoma State Medical Association*, August, 1949.

KEEP THE SOCIALIZERS ON THE DEFENSIVE

Each month we publish a complete report of the activities of Blue Shield, the Nebraska Medical Service. With the report comes a section under the heading, "Know Your Blue Shield," which supplies pointers on the functions and operations of this important organization. The monthly reports indicate steady, uninterrupted progress in the growth of Blue Shield. This progress is the result of untiring efforts of the officers and employees of NMS, the former voluntarily contributing their time and energy and enthusiasm to stimulate the latter to

productive achievement and thus enhance the scope of Blue Shield.

Students of Medical Economics are convinced that the more people actively participate in medical service plans the less likely are the prospects of our being bureaucratized, because if these plans continue in their spread and cover large areas there will be neither need nor desire for medical socialization. Thus the public and the doctors alike will benefit from expansion of these plans.

It is doubtful that the present session of Congress will pass upon President Truman's recommendation for compulsory health insurance, according to those in the "know" in Washington, but everyone concedes that should the Voluntary Plans slow down their pace, the advocates of the paternalistic program will consider themselves blessed with a most potent weapon to be utilized in their own propaganda against us when time and circumstances warrant.

The success of the Voluntary Plans has put the national socializers on the defensive. Let us keep them there.—Editorial, *The Nebraska State Medical Journal*, August, 1949.

GOVERNMENT'S MEDICAL PROGRAM

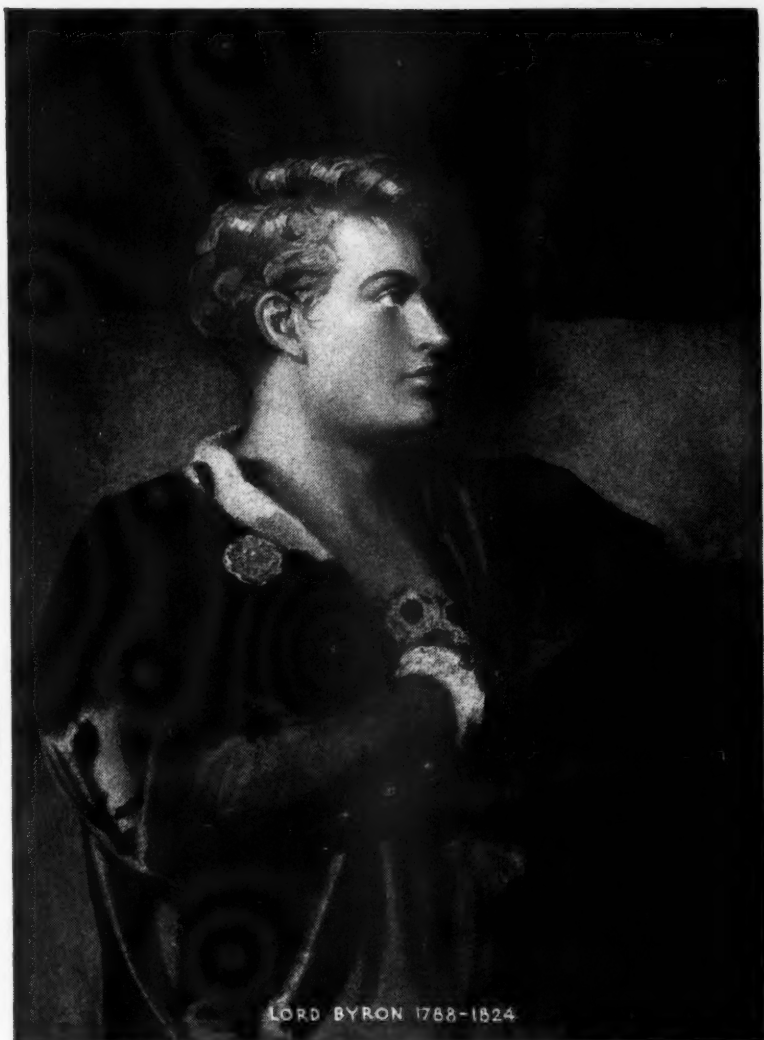
There may be some question as to whether the federal government's medical program will be enacted this year.

Let there be no doubt, however, that eventually there will be some such bill. Both political parties are committed to it; under the Wagner-Murray-Dingell Bill and under the Taft Bill.—We both need to change our tactics. We must seek to direct the change into the best channels; channels in the interest of public welfare, for one of our greatest assets is medical progress.

The price of government in Great Britain is 40 per cent of all incomes; much more of the incomes of the successful and energetic, killing the motive power that keeps it alive.

The amount of our own national income being taken by federal, state and local governments is about 25 per cent. Some may think that this is moderate compared with the more clearly ruinous British 40 per cent.

It is, in fact, dangerously excessive. The British still have part of their capital deficiency made up for them by our ERP. No one will do that for us.—Editorial, *Guildcraft-The Magazine of Ophthalmic Dispensing*, June, 1949.



★ *Epileptic Men of Genius* ★

The brilliant English poet, Lord Byron, who had many mild convulsive attacks during his short life, is an outstanding example of the fact that epilepsy need not cloud a man's mentality.

Comparative studies have shown that in some cases better control of grand mal as well as petit mal seizures can be obtained with Mebaral than with corresponding doses of other antiepileptic drugs. Mebaral produces tranquillity with little or no drowsiness. It is particularly desirable not only in epilepsy but also in the management of anxiety states and other neuroses. The fact that Mebaral is almost tasteless simplifies its administration to children. Average dose for children $\frac{1}{2}$ to 3 grains, adults 3 to 6 grains daily. Tablets $\frac{1}{2}$, $1\frac{1}{2}$ and 3 grains.

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Michigan Medical Service

HOW VETERANS LIKE HOME TOWN MEDICAL CARE PROGRAM

We have recently started a survey among veterans who have received services through the Michigan Medical Service Home Town Care Program. Five thousand cards or more are being sent to veterans who have received services, asking them to comment on this program.

We have asked the veterans to indicate whether or not the Home Town Care Program is entirely satisfactory and specifically, "How do you like this service as compared with the other types of medical care through which you have received treatment?" The following is a list of some of the typical replies:

"I am fully in favor of this type of treatment. It is very convenient, and sets a person more at ease."

"The confidence in the doctor of your own choice, plus no veterans mile-long line-up make this service ideal."

"It is dependable and complete. Takes worry out of illness."

"I appreciate this service very much. It's about the best and the fastest service I know of."

"I like it very much. Keep up the good work."

"By far superior—immediate attention—Best of service. I thank you."

"It enables me to make my appointments without interfering with my work. No waiting time."

"A job well done."

"I like this service much better, in fact I really enjoy being treated."

"As good as any private medical care I have ever had. Better than the mass production care I have received elsewhere and in the Army."

"This service is the very best. I have a family and cannot miss the time I would have too to report to a hospital."

"I believe it is one of the best ways for a veteran to receive treatment that has ever been set up."

"This is the best medical care I have received and I have the best doctor in Detroit. Never have to wait."

"It has been very convenient as I have been able to get treatment at any time. Please continue the system."

"In my opinion, this type of service is the best possible."

"Have received the same care that I did when I could pay my own way."

"I am completely satisfied with this care. I find that my treatments are more carefully taken care of with no waiting."

"I am very well satisfied. The Doctor I selected has been very co-operative. Both he and Michigan Medical Service have my sincere thanks."

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